

E 'ao lu'au a kualima: Writing and Rewriting the Body and the Nation

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Abstract

Currently the Kanaka Maoli, or Maoli are struggling to restore Ka Lahui, or the Maoli nation. At the same time, they face the highest rates of chronic disease and cancer, and have become in the discourse of Western medicine the "unhealthy Hawaiian." This article seeks to trace the genealogy of the "unhealthy Hawaiian" as it articulates with the attempted destruction of the nation. But health is a contested terrain, and for the past two hundred years, the Maoli have resisted colonization and now neo or postcolonialism. This resistance encompasses health as well, in maintaining tradition against the inscription of the Maoli into the American and international political economies, as well as the restoration of the Maoli ola and the health of Ka Lahui.

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Writing and Rewriting the Body: Recovering the Health of the Nation

Introduction: Ola na iwi

A nation is more than a flag, a constitution, or a capitol; it is the people or peoples who construct that nation. The United States and a small group of non-native conspirators overthrew the government of *Ka Lahui Kanaka Maoli*, the Hawaiian nation in 1893; but Ka Lahui existed prior to the conquest of the islands of *Ka Pae 'Aina O Hawai'i*, the Hawaiian archipelago, and continued to exist after the overthrow. Although the reconstruction and perpetuation of Ka Lahui has been ongoing since time immemorial, the "Hawaiian renaissance," beginning in the 1970s, marked a resurgence in efforts to actively rewrite Ka Lahui as an institutional entity, from '*olelo makuahine* to and finally actually reclaiming governance of Ka Pae 'Aina (Kanahale, 1979). As part of the process, *Maoli*, particularly Maoli healthcare practitioners began to examine the health status of Maoli, particularly the relationship between the health of the non-human nation, constituted as '*aina*, '*kai*, and the spiritual world, and the health of the human Ka Lahui.

This article exams the construction of the health of the nation, and the connections between the health of the non-human nation and the dismal health statistics of the human Lahui. It argues

that the health of the human nation is intimately connected to the health of the non-human nation, and that the identity of the Maoli and restoration of *pono* is dependent on foregrounding and protecting those connections. In particular, the healthy Maoli requires the reunification of mind, body and spirit on the '*aina and in the kai. Within this context, the role of Western medicine in constructing the "unhealthy Hawaiian" is critically examined, as well as Maoli efforts to resist this construction, and reclaim the body of Ka Lahui: . . . [Maoli] were not 'the simple-hearted victims of colonialism [but] participants in a moral and cognitive venture against oppression' (Silva, 2004, p. 6). The article ends by positing that decolonization is not enough: what is needed is *rekalonization*. Rekalonization is the active reassimilation of the body of the Maoli into the body of the Lahui, through participation in protocols such as the consumption of *kinolau*, or body forms, and working the '*aina and kai.**

Health is a social construction, either on a gradient from healthy to unhealthy or death, or as a dualism: one is either healthy or unhealthy (McMullin, 2005). This article, as that of McMullin (2005), will problematize the Western construction of health, which focusses on the individual and a predominantly internal causation of states of unhealth. Instead, health is historically and culturally contextual;

"I think to be a healthy Hawaiian means that you understand your culture. You know it's . . . this is the way we were raised when we were young, it wasn't a good thing to be Hawaiian. My grandparents spoke Hawaiian and we weren't allowed to speak Hawaiian. So we lost the language. My grandmother practiced the ancient religion but she didn't pass it on. So we didn't learn the religion. So much was lost. I think there's a difference . . . —So a healthy Hawaiian would be someone who's practicing those things?—Uhm hmm. And understands what it means to be Hawaiian and how that's different from being a white, you know or an Anglo or whatever." (McMullin, 2005)

In the discourse of Western medicine, Kanaka Maoli emerge as the people with the worst morbidity and mortality in Ka Pae 'Aina (Blaisdell, 1993, 1995). While Kanaka Maoli writers point to the stark contrast between the pre-contact and post-contact health of Kanaka Maoli, and ascribe agency to political-economic factors, particularly "Kanaka Maoli depopulation and minority status from continuing foreign transmigration, colonial exploitation with Kanaka Maoli landlessness and economic dependency, coercive assimilation, cultural conflict and despair, adoption of harmful foreign ways and institutional racism" (Blaisdell, 1995); Haas, 1992; Mokuau, 1990).

Earlier Western historians characterize Hawaiian health similar to this commentator: They are firm believers in sorcery. With reference to their sick, there is no possibility that these primitive beings could possess any knowledge of botany and the medicinal uses of plants and other substances... (Bushnell, 1993).

Most modern analyses of Kanaka Maoli health reflect the following depictions of agency:

As the minority population of United States grows, so do the reports of diabetes and chronic kidney disease. New immigrants also adopt a more Western diet when they settle into the United States, which seems to increase their chances for obesity and Type 2 diabetes. Diabetes is a disease that affects the body's ability to produce or use insulin. Type 2 diabetes is also known as adult-onset diabetes or non-insulin dependent diabetes.

The Western diet is high in processed and fast foods. Many processed foods have little nutritional value and often contain high amounts of fat and sodium. A study of obesity in China has linked the increased weight in children to the increased availability of fast food as well as a diet emphasizing more Western foods than traditional Eastern foods.

Obesity is a cause of insulin resistance, which can lead to Type 2 diabetes. Obesity is also linked to some ethnic groups. A University of North Carolina at Chapel Hill study concluded that for unknown reasons, African American women become obese twice as fast as white women. The rate for Hispanic women is about midway between the two. Hispanic men become obese 2.5 times faster than white men, and after the age of 28, African American men became obese 2.2 times more rapidly than white men.

If minorities are more prone to being overweight, this makes them more at risk for Type 2 diabetes. Because diabetes is the leading cause of chronic kidney disease, minorities also have a greater risk of developing kidney disease. davita.com

An educator with Hui Malama Ola Na Oiwī constructs the health of Kanaka Maoli thus:

"it's a cultural thing. Caucasians access medical care quicker, whereas Native Hawaiians don't see a doctor until it's a crisis," [she] said. "Their diet also changed dramatically when other people began moving here. Before, everything was steamed and baked. there was very little meat, but lots of fish and vegetables. today, we live in a fast-food society, a very fatty diet" (Eaton, 2005).

These constructions mystify agency, placing the health of Kanaka Maoli in the inevitable dialectic of modernity/ postmodernity, helpless against the hegemony of hegemonic capitalism, immigration and the fast food industry. Similarly, Western medicine posits the "risk factors" for diabetes as possibly genetic, obesity, diet and physical inactivity, while ignoring race, class, gender, sexual orientation and history. As King (1989) and McMullin (2005), the identity of the "unhealthy Hawaiian" as become as problematic as the illnesses confronting the

Maoli: the Maoli inherently lacks discipline (in both traditional and Foucauldian terms), and is not "progressing" towards the Western paradigm of health.

Body of Kanaka, Body of Lahui

The alienation of the Kanaka Maoli from the 'aina has been accompanied by the alienation of the Kanaka Maoli from the *kino* (body), the *wailua* (spirit), and the *no'no'o* (mind). From a time when pono was balance between *kino*, *wailua* and *no'no'o*, the political economies of colonization, through Western medicine, have produced a fractionated identity, where the disconnect between reified mind, body and spirit results in the unhealthy Hawaiian (King, 1987; McMullin, 2005).

Situated and Engaged

The analysis in this paper is situated and engaged. It is situated in the discourse centered around Maoli health, and the health of Ka Lahui Kanaka Maoli. It is engaged, because it seeks to provide possible paths of research to improve the health of Maoli, specifically by contextualizing the "unhealthy Hawaiian" in the political economy of identity: a specific historic identity, which is a contested ground, as Maoli practitioners and other Maoli seek to reclaim health, particularly in looking outside of the traditional Western risk factors, to question whether aspects of Western medicine itself are risk factors for becoming and being unhealthy Hawaiians.

Ontology and Epistemology

Politics of Knowledge

Traditional Kanaka Maoli knowledge arose from genealogical relationships, from the birth of the universe from the mating of Po'ele and Kumulipo to the emergence of Ka Pae 'Aina from the mating of Papahanaumoku and Wakea, to kalo and the first human from the mating of Ho'ohokuikalani and Wakea (Johnson, 1981; Kame'eleihiwa, 1991). Thus, humans are related to land, as the term *'aina* constructs a relationship, that between the elder sibling, or according to Kame'eleihiwa, the *Akua* "*Aina*" and the younger sibling (Beckwith, 1972); Kame'eleihiwa, 1992). In this reciprocal relationship, the land feeds and protects the younger sibling, whereas the younger sibling must *malama* the elder sibling, to cultivate her

and ensure her health so that the health of the younger sibling is maintained (Kame'eleihiwa, 1992). Thus, if the land was healthy, the people were healthy as well; unhealthy people meant an unhealthy land. *Malama* ensured the flow of *mana* throughout the animate and inanimate world (Kanahele, 1986). The *ali'i* served to mediate these relationships, and a *pono ali'i* meant a prosperous society (Kame'eleihiwa, 1992).

In this context, the 'ohana cared for its close members, and relied on the perpetuation of these relationships for the continuity of the family (Kamakau, 1992; Pukui et al., 1972, p. 134). To care for a sick family member was to *kokua*, or serve (Inglis, 2005). If the family was not able to heal an ill family member, they sought out traditional practitioners, ranging from specialists in herbal medicine, to massage, childbirth, surgery, bone setting, or the engagement of spiritual forces or counterforces (Blaisdell, 1997; Kamakau, 1964; Kekaha, 1986; Malo, 1951).

Contrast with Western Knowledge Systems

Whereas traditional ontology revolves around mating and birth, spinning out interconnectedness from that piko to all of existence, Western knowledge evolves from the individual, through the conquest of knowing and subsequent ownership in the knowable and malleable universe (Foucault, 1970; Loomba, 1998). Western knowledge is privileged as beyond ideology, a metaknowledge; and thus in contrast to traditional knowledge which is inherently ideological, grounded in mythology and illogic (Lyotard, 1993). The Western biomedical model produces disease as the interaction of chemistry and physics, and disconnected from the mind (Charon, 2001; Engel, 1977; Morris, 1999; Stewart et al., 1995). Progress towards health in the Western model is progress towards assimilation to the mechanisms of the postmodern political economy: along with the demographic transition from "poor health" to the diseases of modernity, a people becomes industrialized, "democratized", and leaves the ranks of the "developing" countries to enter into the "First World" (Kleinman, 1997). Health becomes the management of costs to maximize resources (Kleinman, 1997).

In contrast, a postmodern analysis of illness extends beyond the biophysical model, to include history, gender, race and class (Morris, 1998). As Morris (1998) analyses, in the postmodern milieu, the distinction between the "objective" disease produced by the biophysical discourse of Western medicine and the "subjective" illness experienced by the individual is blurred. This analysis recognizes that even a diagnosis is constructed, and that neither the "objective" diagnostician nor the person experiencing the illness is unchanged by the making of the diagnosis, or its implications, as the diagnosis itself, or its lack, makes the body a subject of medicine (Charon, 2001; Morris, 1998). Moreover, illness is irretrievably embedded in culture: that of the practitioner, the person experiencing her illness, and her family (Morris, 1998).

Western physicians and medicine began to displace and eventually exert hegemony over traditional Maoli medicine as the land was being lost and sovereignty gradually eaten away through dominance of non-Maoli members of government. Illness became a biophysical phenomenon, the interaction of immune vulnerabilities and introduced pathogens, instead of an exchange between the Maoli and the akua; simultaneously, and 'aina became land and property, without history or *mo'oku'ahau*. It was not simply coincidental that the first missionaries included a physician; while Christianity provided the spiritual theology for delinking body and soul. Western medicine provided another ideology to construct the body of the Maoli as a source of weakness.

Thus, the knowing of the body of the Kanaka Maoli and Ka Lahui was intimately linked to the appropriation of the land and attempted destruction of the nation. In a different context, Brecht describes the speech of a worker to a doctor:

We know what makes us ill
When we are ill we are told
That it's you that will heal us.

For ten years, we are told
You learned healing in fine schools
Built at the people's expense

And to get your knowledge
Spent a fortune
So you must be able to healing

Are you able to heal?
When we come to you
Our rags are torn off us
And you listen all over our naked body,
As to the cause of our illness
One glance at our rags would
Tell you more. It is the same cause that
wears out
Our bodies and our clothes

The pain in the shoulder comes
You say, from the damp; and this is also
the reason
for the stain on the wall of our flat.
So tell us:
Where does the damp come from?

Too much work and too little foods
Makes us feeble and thin.
Your prescription says:
Put on more weight.
You might as well tell a bullrush
Not to get wet.

How much time can you give us?
We see: one carpet in your flat costs
The fees that you ear from
Five thousand consultations

You'll no doubt say
You are innocent. The damp patch
On the walls of our flats
Tells the same story.

Invasion and Ma'i: The Devastation of the Body: *pu'ali ke kalo i ka wai'ole*

As kalo does not thrive when there is no water, so the Maoli did not thrive with the introduction of previously unknown infectious diseases, beginning in 1778 with the arrival of Capitan Cook's crews. As Pukui (2003) relates, "*lawe li'ili'i ka make a ka Hawai'i, lawe nui ka make a ka haole*, or that the previously known illnesses only took few lives, whereas foreign illnesses wrought devastation (Pukui, 2003, p. 211). Samuel Kamakau (1996) writes of the gifts of Cook thus:

“‘O na hua a mea na 'ano'ano o kana mau hana i kanu ai, ua 'omamaka no ia a ulu, a lilo i mau kumula ho'olaha e ho'oneo ai i ka lahui kanaka o keia mokupuni:

1. 'O ka pala i hui pu 'ia me ke kaokao.
2. 'O ka ho'okamakama ku'ai kino.
3. 'O ke kuhi hewa he akua, a ho'omana.
4. 'O ka 'uku lele me ka makika
5. 'O ka laha 'ana mai o na ma'i luku
6. 'O ka loli 'ana o ka 'ea e hanu ai.
7. 'O ka ho'onawaliwale 'ana i na kino.
8. 'O ka loli 'ana o na mea ulu.
9. 'O ka loli 'ana o na mea ho'omana, a hui pu me na ho'omana pegana.
10. 'O ka loli lapa'au 'ana.
11. 'O na kanawai o ke aupuni.”

Silva (2004) translates this passage as follows (Kamakau, 1996, p. 57; Silva, 2004, pp. 22-23):

“The fruits and the seeds that his [Cook's] actions planted sprouted and grew, and became trees that spread to devastate the people of these islands.

1. Gonorrhea together with syphilis.
2. Prostitution.
3. The false idea that he was a god and worshiped.
4. Fleas and mosquitos.
5. The spread of epidemic diseases.
6. Change in the air that we breathe.
7. Weakening of our bodies.
8. Changes in plant life.
9. Change in the religions, put together with pagan religions.
10. Change in medical practice.
11. Laws in the government.”

This construction of illness, marking both the introduction of disease and “change in medical practice” as well as “laws in the government” as being part of the gifts which destroyed Ka Lahui contrasts sharply with the earlier archaeology of Davida Malo, who traced agency for the devastation of Ka Lahui to the misdeeds of the ali'i, who failed to fulfill their obligations in maintaining pono between the Akua and maka'ainana. It was not the ali'i alone, however, who bore responsibility, for the Maoli practiced wasteful warfare, human sacrifices, and abortions because of “women's vanity” (Malo,

1839; Silva 2004, p. 25). Significantly, traditional practitioners and the makaainana also bore spiritual as well as secular responsibility, particularly in a failure of “morality,” which “arose from the ignorance of the people at that time, their manner of living, the want of care and nursing when sick; and their ignorance of the proper use of medicine.” Silva and Arista both contextualize Malo's discourse within that of a Maoli who has appropriated the cosmology of American Christianity, and who bricolages both a traditional understanding of the role of the ali'i in maintaining pono with a Christian ethic of condemnation of traditional culture and political economy (Arista, 1998; Silva, 2004, p. 25).

The loss of the physical nation, specifically depopulation, was accompanied by the loss of the spiritual foundations when Ka'ahumanu and Keopuolani, the *kuhina nui* and most sacred wife of Kamehameha Nui, respectively, ate openly with Liholiho, and so abrogated the *'aikapu*, or sanction against men and women eating together. This began the dismantling of the *kapu* system, and was followed quickly by the physical dismantling and destruction of many heiau and sacred objects by agents of Ka'ahumanu, as Osorio articulates the two processes:

“Perhaps these two things were not perceived as mere coincidence by the Hawaiian people. There is evidence that Natives saw the growing presence of foreigners in the Islands as contributing to the miserable fortunes of the Hawaiian people. Many of them, even as Christians, wished the *haole* would simply go home. At the same time, the *haole* and their new religion promised to rescue the people and their chiefs from the social breakdown that accompanied the *'Ainoa* by introducing a new commitment and discipline — namely Christian prohibitions, which were understood to replace the old *kapu*” (Osorio, 2002, p. 11).

Although there was resistance to the new religion, it gradually became the dominant belief system. This change, however, was a dialog, so that mana became appropriated to the new Akua, and beliefs about causality and consequence changed from the centrality of the role of the ali'i in maintaining pono between the Akua, Maoli and 'aina to new ascriptions of original sin

and the Western discourse of pathophysiology. As these beliefs changed, so did practices related to health and healing (Inglis, 2005, p. 228; MacPherson, 1995).

Christianity: Alienating the Body, Alienating ka lahui

The Christianity inscribed on the Lahui by the American Congregational missionaries was one which demonized and stigmatized the body, attempting to segregate the body as the seat of evil. This discourse is in marked contrast to Maoli constructions of the body, which celebrated being in the body, and which manifested itself in the health status of Maoli.

During the Kingdom period, the Mo'i, despite the overlays of 'ainoa and Christianity, knew the centrality of their role in maintaining the health of the nation on multiple levels (political, physical, and spiritual). They provided leadership in resisting colonization, while at the same time facilitating colonization through institutions of property and franchise (Silva, 2004, p. 122). Kalakaua reenacted the traditional role of the ali'i through participation in cultural roles, including the revitalization of the hula, 'oli, and mo'oku'auhau (Silva, 2005).

Medicine

Maoli medicine was advanced at the time of Western invasion, including both subspecialists ranging from surgery to obstetrics, as well as a pharmacopia of at least 100 medicinal plants (Wong, 1994). *Kahuna*, or specialists, were selected and then trained from childhood, as compared to the relatively short training of Western physicians. The kahuna additionally devised a classification system for plants which predated that of Linnaeus (Wong, 1994). Kahuna performed housecalls, prescribed diets, and performed *lomilomi* (Hope and Hope, 2003). Wong characterizes thus the specialties of Maoli medicine:

Kahuna laau lapaa- Pharmacologist and general practitioner

Kahuna lomilomi- Physiotherapist, masseur

Kahuna haha- Diagnostician

Kahuna koholua- Surgeon (minor surgery)

Kahuna hai iwi- orthopedist

Kahuna ho'o hanau – obstetrician

Specialists such as the kahuna ho'ohanau prescribed exercises to ease delivery, as well as version and the psychic transfer of labor pains to the spouse or other family members (Wong, 1994). Maoli psychiatry involved both mediation with the akua as well as counseling and possibly psychotropic medications (Wong, 1994). A significant part of dealing with family problems was *ho'oponopono*, which involved both prayer and self-inquiry in a process which Cody (1974) characterizes as "one of the soundest methods to maintain and/or restore healthy family relationships that any society has ever devised." After the arrival of Western disease and medicine, some kahuna would refer Western disease to Western physicians (Hope and Hope, 2003).

Kamehameha Nui may have been involved in the first offshore medical inspection as a member of the boarding party of Kalaniopu'u sent to investigate the arrival of Cook's ships off of Wailua, Maui in 1778 (Mills, 1981). The first Western physician, Thomas Holman, however, arrived with the first American missionary party in 1820. Another missionary physician was to arrive in 1823 with the second party. Kauikeaouli ordered the appointment of the first Boards of Health for each island in 1839, and then the Department of Health in 1850. Vaccinations were established treatment by 1839 (Schmitt, 1995). Although earlier the King and Legislature passed legislation licensing Western physicians, kahuna were noted licensed until 1856 (Mills, 1981). With ongoing concerns about the high infant mortality rate, as well as sterility rates among Maoli men and women, Liholiho and Queen Emma raised funds, subsequently matched by the Legislature, for the Queen's Hospital, whose cornerstone was laid in 1860.

As the human bodies comprising the nation were rapidly dying off, so was the physical body of the Lahui, the 'aina disappearing into foreign ownership in the process begun under the Mahele.

Mahele

Initially, the term *mahele* referred to the redistribution of resources with the changing of ali'i. With each succession of ali'i, lands were redistributed, ensuring that land was not

monopolized, and reflecting the concept of humans as stewards of the land, rather than owners (Kaiser and Roumassett, 2004). A significant change occurred with the ascendancy of Liholiho after the death of Kamehameha Nui: there was no *mahele*, and the holdings of the *ali'i* became inheritable, rather than redistributed. Following the cession and subsequent return of the sovereignty of the Kingdom, Kamehameha III sought to secure the rights of the *maka'ainana* to the land through fee simple title. However, with the *Mahele* of 1848 there was a reification of new relations between *Maoli* and the land. Initially the process divided the land between the King, *Kauikeaouli*, and the *Ali'i*. The land was then further divided, ostensibly to ensure that the *maka'ainana* retained their lands. The three divisions of land became known as those of the Crown (approximately three million acres), Government, and *Konohiki* lands (about one million acres total). All lands were subject to the rights of native tenants, despite this reservation, however, the *Mo'i* and the Legislature were presented with the need to attempt to preserve access and gathering rights traditionally exercised by the *maka'ainana*; thus, they enacted what was to become the predecessor to Hawai'i Revised Statutes section 7-1 (Kanawai, 1850).

Claims to individual *kuleana*, or parcels of land, were made through the Land Commission (Application of Robinson, 49 Haw. 429, 437-38, 421 P.2d 570, 576, 1966; The Fundamental Law of Hawaii, 3). After hearing testimony, the Land Commission would award Royal Patents to certain parcels. The awarding of a Royal Patent vested legal title in the claimant by quitclaiming the government's interest in a parcel (Robinson, 49 Haw. at 438-39, 421 P.2d at 576; The Fundamental Law of Hawaii, 137-39). Any other claims to the parcel must be proven by a showing that a predecessor in interest acquired a Land Commission Award, a Royal Patent, a Kamehameha Deed, a Grant, a Royal Patent Grant, or other government grant for the land in question" (State by Kobayashi v. Zimring, 58 Haw. 106, 114, 566 P.2d 725, 731, 1977). Thus, in the discourse of the Hawai'i State and US courts, the majority of present *Maoli*, whose ancestors did not make legal claims to land, are voiceless.

In this contrast, research by David Keanu Sai and others indicates that underlying the system of fee simple title in the Kingdom was the terrain of vested rights, where the King, *ali'i* in their capacity as *konohiki*, or stewards, and *maka'ainana* retained undivided 1/3 interests in the land; this was the dominion of the Kingdom (Perkins, 2005, p. 199). These vested interests contrast with the proprietary interests, in the form of alienable interests which are bought and sold, and commonly believed to be fee-simple title. Even if a Royal Patent quitclaimed the government's interest in a particular parcel, the other undivided interests, those of the *konohiki*, and *maka'ainana* remain. Thus, there is only one layer of ownership which is alienable, and the underlying vested rights remain, as there has not been a quitclaiming of these interests by either the *konohiki* or the *maka'ainana*.

Even in circumstances where *maka'ainana* received a majority of the most valuable lands, as in *Kahana* on the island of O'ahu, these holdings were lost after a generation through non-judicial foreclosures (Stauffer, 2003). Further lands continued to be lost through the doctrine of adverse possession, and subsequent quiet title actions, often by ranches and other large landowners.

However, as the 'Ainoa destroyed the spiritual foundation for Kanaka *Maoli* culture, so the *Mahele* of 1848 commodified the relations between Kanaka *Maoli* and the 'aina, destroying that relationship through the law (Kame'eiehiwa, 1992; Cook et al., 2003). Genealogical relations were replaced with ownership, and for the majority of *Maoli*, this ownership was either never obtained or quickly lost.

Western law thus became a new inscription on a landscape already crowded with meaning:

reading again opens up all the inbetweens and
the shimmering, burning traces
across the always was
shattering slowly choking resin of sleep
the gears turn
and grind bodies inbetween
to drip into the communion cup
black boots and black jackets on the sand
ink leaks from a black book

across the 'aina
to rewrite boundaries
and obliterate birthings
the ink flows into walls
which write silence, obedience and the
missionary position
mu'mu'u and till death do us part
the ink seeps and makes green carpets
that grow nothing
gates and walls that do their best
to terminate genealogy
but sometimes
ink can run into water
be washed away in the cold flows
and the hot spasms
and the ink
turned sideways
disappears

**Destruction of Nation Through
Destruction of Diet: I ola no ke kino i ka
ma'ona o ka 'opu**

When the stomach is well filled, the body is healthy (Pukui, 2001, p. 135). Food, as much as 'aina and 'olelo, was and is a contested terrain in the political economy of national identity and health. From the means of production, to the foods actually produced, and the manner in which they are consumed, food articulates with health: testimony from the hearings on the original Hawaiian Homes Commission Act illustrates this axiom, as Maoli officials testifying in favor of the Act pointed out the centrality of *kalo* to the Maoli, and how without land, this was impossible.

Medical ideology is the foundation of links between food habits and health/disease, which in turn articulates with racial and cultural identity politics (Nayar, 2002). Thus, as Western medical ideology permeated healthcare in Ka Pae 'Aina, so did Western constructions of healthy diets. The medical ideology of health did not emerge from an uncontested terrain; instead, medical ideology served to reinforce the dominant forces of production. In Ka Pae 'Aina, the inscription of a Western model of health accompanied the inscription and appropriation of land. *Kalo* and other traditional foods were described as unhealthy, as Maoli and other peoples of the islands were encouraged to abandon these foods and adopt foods such as white rice and processed meats. The adoption of these foods

accompanied further appropriation of lands and water, from the adverse possession/quiet titling of former agricultural lands, to the diversion of watercourses to irrigate sugar lands, and later golf courses and housing developments. The loss of lands and water for agriculture, as well as access to traditional gathering sites, meant the loss of the means for sustaining traditional diets and lifestyles. Changes in diet not only moved Maoli from a high complex carbohydrate, low fat, low sodium diet to a simple carbohydrate, high fat and sodium diet, but also major impacts on spirituality and economic resources. Loss of land meant that Maoli could no longer practice "subsistence" agriculture and aquaculture, which destroyed not only relationships to the land through occupation and labor, but also destroying the means of production and thus self-sufficiency. Applying the label of "subsistence" to traditional Maoli agriculture and aquaculture is extremely problematic, because traditional systems of production were not solely for subsistence, but produced surpluses sufficient to provide for classes which largely did not participate in production, such as the *ali'i* and some *kahuna*. Surpluses also underlay the *ahupua'a* system, which enabled the people of *uka*, or the uplands, to concentrate on production of wood, *kapa*, *olona*, *la'i*, ie, and wild birds, while from the *kai*, or ocean came *i'a*, or fish and other marine products.

As more and more Maoli lost access to land, they were forced to the cities, becoming low-wage labor for the new industries of tourism and the US military. Moreover, loss of land meant also loss, to some degree, of the spiritual means of production. Maoli faced barriers, particularly economic, to the reproduction ancestral connections by the consumption of *kinolau* and the performance of rituals inherent in the production of traditional foods.

The appropriation of land is the drawing of new landscapes upon the earth, so it is not surprising that those who sought and eventually gained control over Ka Pae 'Aina displaced subsistence agriculture with export agriculture; *kalo*, *'ulu* and *'uala* were quickly replaced by non-subsistence foods, chiefly sugar and pineapple, but including coffee and macadamia nuts. The colonial relationship to the land was, and still is established by altering the land for colonial

enterprises (Smith, 2003, p. 82). As the Maoli diet, as those of other residents of Ka Pae 'Aina, became increasingly dependent on imports, so the Maoli themselves, in the eyes of the colonizers, became more domesticated, more integrated into the cash economies which had not been a necessity with a land base on which to practice traditional lifestyles (Smith, 2003, p. 83).

Legal

Inscribing Western Ontology and Epistemology Onto 'Aina

From a traditional epistemology, "he ali'i ka 'aina, he kauwa ke kanaka:" the 'aina is the chief, and the person but the servant (Pukui, 2001). Kumu John Ka'imikaua analyses of the relationship of the health of the 'aina and the actions:

"man causes the land to be ma'i. land, left to itself, assumes a perfect and natural state. but land can only take so much. man must malama 'aina or the land will, at some point, cleanse itself and man will pay the price for this. this is more than just physical filth, but is also emotional filth and intent to do harm. using the land for greedy purposes, to defile the land, causes physical, mental, spiritual and emotional illness. for man to be well, man must exercise his kuleana to care for the land so that both can be well and thrive together."

Similarly, Dr. Kekuni Blaisdell posits:

"Since we Kanaka come from the 'aina (environment/cosmos), our parents are sky-father Wakea and earth-mother Papa (sacred environment/cosmos), we are part of this sacred 'aina, we depend on the sacred 'aina for our nourishment, including the ha of Wakea that we breathe with each breath, we return to the 'aina after we leave our mortal flesh at leina (the place where the soul leaps to join the ancestral spirits). No laila (therefore), we Kanaka are only as healthy as our 'aina. As long as the 'aina is/are ma'i (ill), we Kanaka are ma'i. No laila, as long as any land is polluted/contaminated and unhealthy, we Kanaka are similarly."

No Maoli was free of the obligation to malama 'aina (Silva, 2004, p. 40). In apposition, Western law is based on relations of property, and functions to facilitate the transfer of this property as Merry (2000, p. 19) indicates:

"... [m]odern law is itself a creature of colonialism, developed during an ear of mercantilism and imperialism and shaped by those conditions ... the creation of modern law is grounded in relations of imperialism, distinctions of race, and the opposition of savage and civilized ... the system of international law originated in efforts to construct a legal framework for the relations between the Spanish and the Indians that would justify Spanish intervention and war."

In this context of Euro-American law, however, the Mo'i and ali'i sought to preserve and strengthen the independence of Ka Pae 'Aina in an era of global imperialism (Merry, 2000, p. 36). Adopting the grammar of Euro-American jurisprudence allowed participation in the discourse of international law and legitimacy: it was, and still remains to some extents, a measure of resistance and affirmation. Legalization was part of the process of Western civilization, so that the attainment of a commodified system of exchange became a mark of the "superior" achievement of Maoli over other Polynesians and other peoples, both in Ka Pae 'Aina and in the Pacific (Merry, 2000, p. 38).

Land Cases

'Aina is more than land; it describes the traditional genealogical relationship between the Maoli and the Akua, between the younger and the older sibling. David Keaun Sai and Don Lewis, through the Perfect Title Company, foregrounded the struggle over the grammar of property rights in Ka Pae 'Aina through their work in the Perfect Title Company. They contend that the indivisible vested rights of the maka'ainana and konohiki, in all circumstances, as well as the vested rights of the Crown, continue in all lands of Ka Pae 'Aina.

Crown and Government Lands Hawaiian Home Lands

As the Maoli continued to endure high levels of depopulation, Maoli and American political leaders recognized the need for a return of the Maoli to the land, as in a statement from then U. S. Secretary of State Franklin Lane: "the native[s] of the Islands, who are our wards, ... and for whom in a sense we are the trustees, are living in poverty and dying off rapidly" (Vause, 1962). Since the beginning of the Territory, however, the former crown and government lands, many of the most valuable of which had been leased to large ranchers and sugar plantations, had been open to homesteading by members of the general public without regard to ethnicity. During the period of 1917-1921, leases on up to 200,000 acres of these lands were due to expire. With the enactment of the Hawaiian Homes Commission Act, the general homesteading program was terminated, and the most valuable sugar lands were protected, ostensibly to provide income to the new Hawaiian Homelands program through leases (Dinstell, 2000).

Important in the efforts of the sugar planters to impose a 50 percent blood quantum requirement was the higher morbidity associated with Maoli of 50% or more Maoli ethnicity. Although the discussion of the social construction of race is largely beyond the scope of this paper, it should be noted that beyond obvious origins in the American fixation on blood quantum originating with African Americans (the Queen was described as the "illegitimate [child] of a mulatto shoemaker"), and divisions in to quadroons and other "parts," it is likely that the sugar planters and their allies based their insistence on the system of American Indian reservations, where the indigenous nations were required to document blood quantum (Silva, 2004). This documentation was and is required for registration as an enrolled member of a tribe; without reservation, an individual is not recognized as an "official" Indian, and is denied benefits otherwise available to the tribe. The system of segregation and deprivation that resulted from the U.S. "trusteeship" over the indigenous nations of the continent functioned to inspire the Boers of South Africa to model their apartheid system after the American program.

In this problematic context, the original concept of a program to benefit Maoli of 1/32 or more quantum was changed, by the time of passage, to a requirement of 50% or more quantum. With this requirement, those pushing for a higher quantum believed that any lands initially placed within the jurisdiction of the program would eventually accede back to the then-Territory of Hawai'i with the passing of those Maoli of 50 or more percent blood quantum. In addition to this concept, the program was an unfunded mandate: the funding of the program was to come solely from receipts from the lands not in homesteading, limited to thirty percent of sugar land and water leases (Dinstell, 2000). Additionally, the Territory and later State of Hawai'i consistently abused their fiduciary responsibilities, as lands were transferred to other federal and non-governmental entities and persons. Moreover, the lands set aside in the original act were marginal, and homesteaders did not receive title to the lands, thus requiring them to remain dependent on the program for financing (Dinstell, 2000).

Significantly, however, the Supreme Court of the State of Hawai'i has affirmed that the purpose of the Hawaiian Homes Commission Act was to establish a program for the rehabilitation of Maoli, under which the US government, and later the State upon Statehood, assumed fiduciary responsibilities (*Ahuna v Department of Hawaiian Homelands*, 64 Haw. 327, 338, 640 P.2d 1161, 1168, 1169, 1982). This court has also held that individual beneficiaries under the act have a private right to action against the Hawaiian Homes Commission (HHC) and Department of Hawaiian Home Lands (DHHL) for alleged breaches of trust (*Aged Hawaiians vs Hawaiian Homes Commission*, 78 Hawai'i 192, 891 P.2d 279, 1995). Even given these rulings, however, Maoli face many obstacles in attempting to actuate the stated intent of the Hawaiian Homes Commission Act, which was to rehabilitate Maoli. Since the chairpersonship of Hoaliku Drake, the Commission has interpreted this mandate to imply that qualified beneficiaries should be equivalent to other, non-Maoli residents in Ka Pae 'Aina, residing in master-planned communities (Dinstell, 2000). Although the HHC/DHHL have begun to work on a small number of more affordable housing

developments, for the vast majority of qualified Maoli, as well as those of less than fifty percent quantum, the developed communities remain unaffordable.

Adverse Possession and Loss of Lands: Hana'i'o ka ha'ole

The foreigner, or particularly European and Euro-Americans, "does it in earnest" (Pukui, 2001, p. 55). The Maoli did not look on land as a commodity to be owned, and generally did not order people off as trespassers. With foreign ownership of the land, however, came enclosure and the enforcement of trespass law. While some landowners sought to purchase land from Maoli, the purchasers often sought to expand their holdings, and others to establish holdings, through the doctrine of adverse possession. This doctrine, originating in English common law with the enclosure of the commons and beginning of the Industrial Revolution through expansion of sheep herds for wool production, enables a claimant to pursue a quiet title action after a prescribed amount of time using another's land without the opposition of the landowner (Hawaii Revised Statutes, sec 669). Specifically, an adverse possession claim requires five elements:

It must be [(1)] hostile or adverse; (2) actual; (3) visible, notorious and exclusive; (4) continuous; and (5) under claim of ownership. The party who claims adverse possession has the burden of proving that the foregoing elements have existed for the statutory period of not less than 20 years. In addition, [that party] must prove, by clear and positive evidence the location of the boundaries [that party] claims. Such boundaries must be established at the inception, during the continuance, and at the completion of the period of adverse possession (Campbell v. Hipawai Corp., 3 Haw. App. 11, 13-14, 639 P.2d 1119, 1120-21, 1982).

Particularly given the fundamental dichotomy in understandings between maka'ainana and foreigners in relationship to ownership of land, large areas of formerly Maoli land were lost, often due not only to misunderstandings, and sometimes subterfuge, not only during the actual period of adverse possession, but in the process

of the quiet title action. Although the laws establishing causes for adverse possession in Ka Pae 'Aina required, and still require notice to potential claimants to the lands in subject, potential defendants need sometimes extensive genealogical knowledge to simply know that they may have a claim. If they believe that they may have a claim, they then must have the means to answer a legal complaint, and to contest the plaintiff's claims in court. This process, requiring legal representation, thousands of dollars and years, is often beyond the means of many Maoli. Moreover, the Hawai'i Supreme Court has ruled that substantial interest in the property and that [its] title is superior" to any of the other parties in an action (Maui Land & Pineapple v. Infiesto, 76 Hawai'i 402, 408, 879 P.2d 507, 513, 1994). Thus, lands continue to be lost to small, medium, and large landowners. With the loss of lands to foreigners came the loss of genealogy, of connections to the kupuna and the means of continuing traditional and customary practices. Thus, the loss of lands was not simply a loss of living and agricultural/aquacultural space: it was a loss of culture and identity.

Traditional and Customary Rights

The alienation of the proprietary rights of land as a result of the Mahele and Land Commission process produced a realization in the Mo'i that instead of protecting the rights of the maka'ainana, oftentimes alienation of land produced hardship to those people who lived from the land. Cut off from resources essential to survival, such as 'aho cord and ti, maka'ainana were further marginalized. As a result, Kauikeaouli signed what was to become, in the period of statehood (Hawai'i Revised Statutes 7-1):

"Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, aho cord, thatch, or ki leaf, from the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and right of way. The springs of water, running water and roads shall be free to all, on all lands

granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.”

This portion of the Kuleana act was crafted to protect the traditional mauka-makai practices of the ahupua'a: "the proposition of the King . . . a rule for the claims of the common people to go to the mountains, and the seas attached to their own particular land exclusively, is agreed to." Privy Council 1850: 713. This act has been read in conjunction with what has become Hawaii Revised Statutes 1-1, which modifies English common law, interpreted by English and American caselaw by "Hawaiian judicial precedent" and "Hawaiian usage." These sections, which were initially interpreted narrowly by the courts of the late Kingdom and Territory, later became the basis for reshaping the judicial landscape concerning property rights in Ka Pae 'Aina.

Tradition, Writing and Health

Traditional Kanaka Maoli spirituality evolves around relationships, particularly the relationships of descent.

As Silva (2004) indicates, traditional practices are the *iwikuamo'o*, or spine of Ka Lahui, “without their own traditions they could not stand up to the colonial onslaught” (Silva, 2004, p. 88). The Mo'i saw the need to preserve those traditions that the missionaries had sought to ban, by specific church edict for both hula and la'au lapa'au, and indirectly for traditions such as mele, 'oli, mo'olelo, and mo'oku'auhau. Traditions connected the Mo'i with the nation through genealogy, as the other traditions reconstructed the narratives of origin, nationhood, and resistance to the missionaries (Silva, 2004, p. 89).

Mele

As hula went underground, Maoli turned to other media for expressing their nationalism and opposition to the further advancement of non-native control. Thus, Kalakaua composed Hawai'i Pono'i, which referred back to the era of Kamehameha Nui for imagery. After the overthrow of the Monarchy, mele, often composed in the new idiom of guitar or 'ukulele based songs, continued to express solidarity

within the Lahui and resistance to occupation: one famous example is Kaulana Na Pua, from which one verse follows (Chock 2004b; Prendergast, 1895):

Kaulana na pua a`o Hawai'i
Kupa'a mahope o ka `aina
Hiki mai ka `elele o ka loko `ino
Palapala `anunu me ka pakaha

Famous are the children of Hawai'i
Ever loyal to the land
When the evil-hearted messenger comes
With his greedy document of extortion

Songs such as Hawai'i 78 reflect a pro-Maoli, pro-Monarchy and anti-development perspective (Chock, 2004b; Ioane, 1978):

If just for a day our king and queen
would visit all these islands and saw everything
How would they 'bout the changing of our land
Could you just imagine if they were around
and saw highways on their sacred grounds
How would they feel if they 'bout this modern
city life?

Other songs, such as Ku'u Home O Kahalu'u, lamented the loss of place, specifically Maoli places with the contagion of development (Chock, 2004; Santos, 1976):

I remember days when we were younger
We used to catch 'o'opu in the mountain stream
'Round the Ko'olau hills we'd ride on horseback
So long ago it seems it was a dream
Last night I dreamt I was returning
and my heart called out to you
But I fear you won't be like I left you
Me kealoha ku'u home o Kahaluu

Even originally English songs, such as Israel Kamakawiwo'ole's cover of Somewhere Over the Rainbow/What a Wonderful World, in the context of the sovereignty/self-determination movement references the unfulfilled promises of the Apology Resolution and other gestures. D 2003.

Thus, as Silva (2004) situates them, mele were and are another expression of resistance for Maoli against resistance. But even more, mele, particularly the resurrection of writing in ka

'olelo makuhine since the "Renaissance" of the 1970s, are an affirmation of survival and an assertion of self-determination in a Western and English-dominated cultural landscape. Chock 2004a; Chock 2004b.

Ke ala aloha, 'a'ole ala koa: Domesticization The Construction of Hawaiian Women and Men

As the nation became a landscape of struggle, so did the Maoli identity. As the land was colonized and domesticated into the grammar of fee simple and property, so the Maoli became Hawaiians, better fitting into the imperial grammar of Western geopolitics (Cook et al., 2004). No longer were Maoli *kane* and *wahine*, *maka'ainana*, *ali'i*, *kahuna*, *mahi'ai* and *lawai'a*; instead, Maoli became Hawaiian entertainers, hula girls and urban proletariat, policemen, firemen, and laborers. Moreover, civilization required the domestication of the body, the containment of sexuality to prescribed American, Christian norms (Merry, 2000, p. 39).

As law sought to domesticize the body, engaging in "illegal" activities such as extramarital sex became means of resistance, a differentiation of the self from dominant groups (Merry, 2000, p. 219). As Merry indicates, the vast majority of defendants in cases involving "adultery" and "fornication" were Maoli: civilization required conduct in line with the prescribed Christian morality (Merry, 2000, p. 221). For the missionaries and their descendants, sexuality was engaged solely for duty and procreation, whereas for the Maoli, sexuality was enmeshed within the kapu system of the sacred and the profane. Sexuality was a means of political advancement, both for those of rank and sometimes *maka'ainana* as well; conversely, sexuality was at the same time, except for the most kapu *ali'i*, a relatively free landscape, navigated without shame or guilt, and with fluid relationships (Handy and Pukui, 1972; Linnekin, 1990; Malo, 1951; Merry, 2000, p. 228; Ralston 1989). Marriage was *noho pu*, or "just settling in," a mutual agreement of kupuna about the union of a man and woman (Handy and Pukui, 1972: pp. 44, 107; Merry, 2002, pp. 231-32). Such unions could be ended easily, although they were usually permanent (Handy and Pukui, 1972, p. 110). Significantly, the unit of production was not the nuclear, husband/wife

union, but instead the *'ohana*, the extended family under the leader of the *haku*, or elder male (Handy and Pukui, 1972, p. 6; Merry, 2000, p. 232).

Maoli ideology concerning sexuality contrasted with that of American Puritan Christianity, which foregrounded original sin, and held that sexuality existed only for procreation. Moreover, the sublimation of the body within the legal framework through laws prohibiting adultery, prostitution, and imposing marriage was also to further incorporate the body into the mechanisms of property. This rewriting of the body, particularly the body of the *wahine*, was on multiple levels. A woman became the property of her husband, with a prescribed role of service: a woman was not a self-determined subject, a position only open to men (Merry, 2002, pp. 255-56). A woman also became subject to the disciplines of the body, from religious prescriptions against the "seductions of evil" to civil laws governing sexuality (Merry, 2002, p. 72). As Merry indicates, "marriage and the control of sexuality was at the core of the mission project." The missionaries constructed the new, self-discipline subject through civil law, so that by 1827 laws against both adultery and fornication, and establishing indissoluble marriage were enacted (Merry, 2002, p. 73).

At the same time, the missionary and missionary descendant efforts to domesticate Maoli women also worked to de-center women, and simultaneously to further the destruction of the duality which had been central to the Maoli knowledge system.

Tourism and Prostitution

With the arrival of Westerners came the institution of prostitution (Kamakau, 1961, pp. 95, 100; Ralston, 1989). Although initially prostitution was a reciprocal relation, these exchanges were converted to buying and selling as Maoli became more thoroughly integrated into the new political economy (Merry, 2002, p. 228). Initially, the missionary advisors to the King encouraged measures to outlaw prostitution, such as an 1835 law making illegal "illicit connections," and an 1841 act "Law Respecting Lewdness" (Greer, 2000). Subsequently, with the efforts of Lota Kamehameha and Queen Emma to invigorate

Ka Lahui, the devastation wrought by syphilis and gonorrhea, chiefly in infertility was identified as an infectious, rather than moral process, and the Act to Mitigate the Evils and diseases arising from Prostitution” was passed in 1860. The Act required the registration and periodic physical examination of women engaged in prostitution. Although another act outlawed the keeping of brothels, by the turn of the 20th century, prostitution was contained in circumscribed areas of Honolulu.

As the US military was the one of the driving forces for the attempted annexation of Ka Pae 'Aina, and came to be one of the dominant forces in the Territory and later State, it also used the sex industry, both formal and informal in Ka Pae 'Aina for its soldiers. During World War II, the military assumed control of the sex industry in Honolulu, passing regulations and commandeering many of the hotels in Waikiki for its use. At the same time, it did not prosecute the sex crimes of its soldiers and sailors, so that hostility grew towards the US military among local men, particularly with the poor treatment, including rape, of Maoli women by US sailors. *Waikiki: A Thousand Stories*.

Disease

The medicalization of the body is not a neutral process; instead, Western medicine, foregrounds and centers the knowing subject/ physician/ researcher as the repository of knowledge and producer of cure.

In this section, which considers the impact of different pathologies on Maoli morbidity and mortality, the diseases themselves are necessary, but not sufficient explanations of the unhealthy Hawaiian. Pathophysiology has been strongly associated with ethnicity, but as Blakely et al. indicate in Aotearoa, the external political economy, particularly unemployment and underemployment, as well as income disparities play a large part in a partial explanation of health disparities (Blakely et al., 2005). In the analysis put forth in this article, even adding behavioral factors and differential access to health services is not a sufficient explanation; instead, *mana* and *mo'oku'auhau* must be considered as factors to the restoration of Maoli *ola*. Moreover, Western medicine tends to focus on the health of the individual in terms of

treatment, or assigns certain ethnicities as "risk factors;" in the US, however, there is not group responsibility, either for group health or group unhealth. In the US, health, specifically the attainment of a disease-free state, is a marker of successful integration into American society (McMullin, 2005). Those peoples who have not achieved health, or who have lost health, are by definition not successful, outside the boundaries of the norm (Crawford, 1994; McMullin, 2005).

In the US, health is not a fundamental right. This is in marked opposition to international law:

“health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector” (WHO, 2004).

This language, paralleling that of the Universal Declaration of Human Rights, goes on to point to the unacceptability of the inequalities inter- and intra-nationally, and to the responsibility of governments to implement measures to ensure that people reach socially and economically productive lives. The implementation of this goal is through primary healthcare (WHO, 2004). The right to health is well established in international law, through such instruments as the Universal Declaration of Human Rights, Article 25; International Covenant on Economic, Social and Cultural Rights, Articles 7, 11, 12; Convention on Elimination of All Forms of Discrimination Against Women, Article 10, 12, 14; Convention on Elimination of All Forms of Racial Discrimination, Article 5; and Convention on Rights of the Child, Article 24 (UNOHCHR, 2005). Although not a focus of this article, it should be noted that under Article VI of the United States Constitution, international law is the supreme law of the land. Thus, although the US government often chooses to ignore norms of international law, and enforcement is difficult, the obligation persists.

Infectious Disease

As in Australia, infectious disease was racialized in Ka Pae 'Aina: those with Hansen's disease (leprosy), particularly Maoli, were spatially isolated by the mechanisms of the Kingdom and later Territory, while those with similar, and more infectious disease, such as tuberculosis, were self-isolated (Bashford, 2004; Englis, 2005). As Bashford (2004) indicates, diseases such as Hansen's disease were those dominated by "non-whiteness," subject to the quarantine of Western medicine because of the potential threat it posed to the imperium, represented initially by missionaries and Western physicians, and later the colonial apparatus of the Provisional Government, Republic, and Territory. The "healthy" were those who survived, and disease was often located in the non-Western other (Bewell, 1999).

Cancer

Maoli have some of the highest incidences of cancer in Ka Pae 'Aina (Hawai'i Cancer Facts and Figures, 2004; Tsark, 1998). Many of these cancers are linked to personal "choices," including smoking and diet (Frezza et al., 2005; Glanz et al. 2003). In the current US, up to 35% of all cancer mortality may be related to diet, including a lack of high fiber, low animal fat, high fruits and vegetables, and a lifestyle which is active. Obesity itself, particularly in association higher levels of insulin and IGF-1 is associated with a number of cancers, including colon, breast, prostate, pancreatic, non-Hodgkin's lymphomas, hepatocellular and uterine cancers (Bugianesi, 2005; Cerhan et al., 2005; Freedland, 2005; Rapp et al., 2005). With breast cancer, a disease with high associations with obesity, particularly through hormonal effects on adipocytes, despite higher incidence of estrogen and progesterone-positive tumors, Maoli women have higher incidences of both breast cancer and mortality (Hayes, 2005).

Cultural Trauma

The theory of cultural trauma posits that as in the individual with post traumatic stress disorder, certain historical events experienced by a group continue to be experienced by that group, even decades or perhaps centuries after the initial event; the events or processes are a "traumatic loss of identity or meaning, a tear in the social fabric" (Eyerman, 2002). Other

authors characterize cultural trauma as "national trauma," tropes that interpret history through differential lenses (Neal, 1998). These experiences transform communities, oftentimes in negative aspects. There are both biological and psychological bases for the transmittal of the traumas. Biologically, neurons store memories contingently: prior experiences shape the storage of new information based on changes in neurotransmitters, neurohormones and neurotropic growth factors which produce changes in the synaptic micro-architecture, as well as the levels of chemicals involved in cellular communications and gene expression (Perry 1997, 1999). Particularly during childhood, development is use dependent, and subsequent modification of the regulatory system is much more difficult after the first three years of life (Perry, 1999). As an individual experiences new events or processes, the brain processes new inputs and compares them against previous similar patterns of activation to generate a response. If inputs are incorrectly interpreted, state memories may be activated, so that there is a generalization of a specific event, which may become maladaptive. Such is the case with an ex-soldier, who may have state memories of gunshots, and whose state memories of war result in a generalized activation of the sympathomimetic system in response to any startling input. Thus, the autonomic nervous system itself becomes involved in the storage of memory as emotional memory, as a hierarchy of responses evolves: the most advanced response is first, and the most primitive last (Ogden and Minton, 2001; Porges, 1994; Scaer, 2001; Schore, 2001). Importantly, in childhood it is the caregiver who regulates positive and negative states, and she in turn can transmit trauma which she has experienced to her child (Andermann, 2002; Eyerman, 2002; Perry, 1999; Schore, 2001).

Psychologically, cultural trauma is not experienced immediately: it is a struggle of meaning and interpretation (Eyerman, 2002). In Maoli history, the beginnings of cultural trauma are in what Stamm and Stamm (2001) characterize as the era of cultural challenge, when there were epidemics of new diseases, expanded traded opportunities, warfare, competing belief systems, and intellectual innovations. Coterminously, or perhaps slightly

after, Maoli entered a period of cultural loss, dominated by a discontinuity of experience. There, cultural memories were lost, as well as language, the use of traditional resources, and economic opportunities. Maoli also experienced and continue to experience poor health care options and the disruption of family patterns, particularly in the extended family. Although still somewhat in the teleology of "progress," Stamm and Stamm (2001) locate the fourth era of cultural trauma as being that of reorganization and revitalization, where "bicultural adaptation uses the best of both worlds," and there is restoration of sovereignty on individual, family, community and national levels. Particularly important in the context of the present paper is that there is a "renewed sense of health" in the fourth era. The eras of cultural trauma overlap, however, and there may be an uneven progression for members of certain groups from one era to another; for the most acculturated, the transition to reorganization and revitalization may be much quicker, although the cost may be the surrender of most of traditional culture, which can be constructed as an "impediment" to progress in the dominant culture. Additionally, transitions are uneven, so that during the "Hawaiian renaissance," there was a resurgence in language and traditional culture, yet there has yet to be the emergence of a substantial machinery of self-determination (Kanahele, 1979).

The effect of the traumas, although experienced as a group, may be somatized on an individual basis. In the Maoli case, the trauma of alienation from the body and *lahui* may be somatized as behaviors characterized as non-compliance, or self-destructive health behaviors. Maoli may not consciously experience the national traumas of the overthrow or the loss of land; yet at the same time, they may encounter reminders of these events in the high cost of housing or the relative lack of Maoli representation in government or privileged professions. With the national memories and daily reminders, as context, they may in response subconsciously choose to resist dominant models of compliance or "health" by making lifestyle or treatment choices which may not be congruent with the dominant model. Thus, being outside "normality," or health as defined by the American biomedical system, is resistance to the technologies of health, and by

extension the continued occupation of Ka Pae 'Aina (Crawford, 1994; Das, 1990; Foucault, 1973, 1977; McMullin, 2005). In this context, non-adherence to prescribed medications, use of controlled substances, or multiple births out of wedlock are ways of marking one's self as not "normal," not totally subject to the technologies of colonization.

Any program which seeks to modify behaviors then must be contextualized within history, and negotiate and validate the experience of the national traumas while providing a process to go beyond them. This is not a discourse of victimization; instead, it contextualizes behaviors such as substance abuse, over consumption of unhealthy foods, or multiple births outside of marriage within historical and ongoing structural violence.

Along with cultural trauma, perhaps as a result of cultural trauma, there are a number of more traditionally biopsychosocial impediments that some Maoli men identify as barriers to health seeking. Barriers include finances and geographic distance, negative attitudes towards Western medical practitioners, "conflicting priorities," use of traditional and non-Western healing modalities, lack of Maoli health practitioners, and lack of information on services available at Western health institutions (Hughes, 2005). Hughes (2005) suggests that strategies to overcome these barriers include closer communication between community members and practitioners, including reminders, improved access, as well as removing logistical and cost barriers to accessing care. A central place is the foregrounding of *self-malama* as taking care of the family: the health of the individual is linked to the health of the family as relational harmony articulates to spiritual and physical health (Hughes, 2005; Ka'opua Mitschke and Lono, 2005).

Recovering the Nation

Voyaging

The voyages of Maoli canoes based on traditional designs not only served to disprove then-standing anthropological views on the "drift" settlement of Ka Pae 'Aina and Eastern Polynesia, but also were and are visible symbols of the resurgence of the Maoli and connections into *te Moana nui a kiwa*. The voyages,

beginning with those of Hokule'a, were coterminous and a major part of the "Hawaiian renaissance" of the 1970s, which also saw the reemergence of ka 'olelo makuahine, as well as the reoccupation of Kaho'olawe and other land protests. The renewal of Polynesian voyaging contrasted to contemporary anthropological theories which spoke of the stories of purposeful navigation as "myth, and instead held out for "drifting" or other non-guided voyages (Cordy, 1974).

Maoli Healthcare

Part of the reclamation and restoration of the healthy Maoli is the development of a Maoli health infrastructure. This infrastructure is both human and institution, with foundations in Western and traditional practices. This process has already begun, through the establishment of Papa Ola Lokahi and the five Native Hawaiian health care systems. Additionally, the University of Hawai'i, John A Burns School of Medicine has recently implemented the Department of Native Hawaiian Health. Additionally, from a relatively few Maoli physicians, there are now more than 100.

Significantly, agencies and individual Western practitioners have provided leadership to bridge the gap between traditional and Western healthcare practitioners. Medicine itself is a contested space, and both colonials and Maoli struggle to gain control over knowledge and healing practices (Gordon, 2003, p. 42). Thus, Maoli provide leadership in returning to the Maoli ola through insights on history (Blaisdell, (2005) and traditional values (Kanahele, 2005). Also, Maoli and non-Maoli authors recenter the role of culture in providing healthcare (Braun, Fong, Kaanoi, Kamaka and Gotay, 2005; Lassetter and Baldwin, 2005; McMullin, 2005).

Looking to the future and the reconstruction of landscapes, as Kame'eleihiwa (1992) posits, with a pono ali'i, the land and people thrive. The legacies of the ali'i in the current political economy are the ali'i trusts, both acknowledged (Queen Lili'uokalani Children's Center, Kamehameha Schools, Lunalilo Home), and the unacknowledged (Queen's Medical Center and the Queen's Foundation, Kapi'olani Medical Center). The dismal morbidity and mortality of the Maoli are indicia that the universe is far from

pono. The ali'i trusts were created to perpetuate the role of the ali'i to malama for the Lahui. To recreate this relationship, where the pono of the ali'i was measured by the health of the people and 'aina, the ali'i trusts can form the kuahiwi of the reconstituted Lahui. Queen's and Kapi'olani Medical Centers are natural choices for the infrastructure for universal healthcare for Maoli. Such a program might start with providing for those Maoli who have little or no care at this point: children, the houseless and indigent kupuna. Such expenditures would be relatively small. At the same time, services could be constructed to begin to provide, possibly through an expanded network of community health centers, care for all Maoli. This care would not have to be at the exclusion of care for the other peoples living in Ka Pae 'Aina, instead, the Maoli would have care provided for, but in a system of mutual obligation. Kuleana would entail that people enrolled in the plan would be responsible for taking care of themselves, as well as their 'aina. Self and family care would entail participation in regular checkups and screenings, at either Western or traditional providers. Family care would require making sure that kupuna and keiki were also taken care of. Malama 'aina could be accomplished through service projects, depending on the skills of the participant. Thus, those with skills in masonry might help to rebuild fishponds or heiau, or house foundations; carpenters could learn forestry skills, and attorneys could help to develop codifications of new kapu. Part of the reciprocity would also involve participation in production, whether in a family or community garden or lo'i, or a fishpond or forest or wetlands restoration.

You Are What You Eat: Contested Landscapes/ i ola no ke kino ma'ona o ka 'opu

Connections Between Consumption and Healthcare

As George Kanahele indicates, vast areas of 'aina, formerly cultivated for kalo, became rice paddies, and later changed from agricultural lands to hotels and other development (Kanahele, 1995). Prior to this, however, the ali'i acutely recognized the connection the productivity of the land and the centrality of kalo and the health of the nation. While Kamehameha was also known as "black backed"

from working in the sun on his lo'i, Kamehameha IV also sought to preserve the ancient role of the ali'i of exhibiting his role in making the land fecund. Thus, he established a 17-acre lo'i in Waikiki, where he worked, together with other chiefs and maka'ainana (Kanahele, 1995). By 1861, however, "rice fever," specifically the export opportunities in California, gripped the Kingdom, and lo'i were converted wholesale into rice paddies (Kanahele, 1995). Tourism, ultimately triumphed, however, as Dillingham's Ala Wai Canal, brought the end of both kalo and rice production in Waikiki (Kanahele, 1995). With the loss of 'aina for cultivation was the loss of the opportunities for the reproduction of connections associated with working the land and consumption of kinolau.

Poverty and Obesity

Although controversial, most studies indicate at least an association between poverty and obesity (Hofferth and Curtin, 2005; Goldstein et al., 2005; Drewnowski and Darmon, 2005; Chang and Lauderdale, 2005). Obesity rates among Maoli are higher than those in most other ethnic groups in Ka Pae 'Aina (Aluli, 1991; Chai et al., 2005; Mau et al., 2001). As Drewnowski and Specter indicate, energy-dense foods, processed foods with high amounts of simple sugars, fats and refined grains are those often are the lowest-cost to consumers. These foods, particularly with their association with the genetically programmed palatability of fats and sugars, lead to higher total energy intake. Groups in poverty are not able to afford diets rich in fruits, vegetables and lean meats and fish.

In Ka Pae 'Aina, colonization has produced "local" culture. In this culture, featured foods are products such as spam, kalua pig, musubi, lumpia, chicken tonkatsu, kal bi beef, loco moco, and haupia (Wikipedia; Pollard nd). A primary feature is the "plate lunch," which consists of multiple scoops of white rice, macaroni salad, and several selections of meats. Although the plate lunch may contain some "Hawaiian" foods, these foods are removed from their cultural context, or most commonly, foods that have been appropriated into the local gastronomy as "Hawaiian." For example, although pork (along with dog) was a traditionally consumed meat, it was reserved for

special occasions. Moreover, *kalo* or other traditional starches remained the centerpiece of the traditional Maoli meal; meats and seafoods were relishes. With the plate lunch, however, the meat is the centerpiece, and the starches (which are in largest quantity high glycemic index, non-Maoli starches), are side dishes.

Presently, a traditional diet is prohibitively expensive for most Maoli, largely because of the loss of kalo-producing lands, but also because of a general shift from "subsistence" agriculture to export agriculture and non-agricultural land uses:

Our Hawaiian diet has kind of like gotten out of hand for us as Hawaiians 'cause it's so expensive. You know, try go to the market buy fish and it's all kike, at times it's six to seven dollars a pound, depending on the season . . . Trying to go otu and find poi, which is a basic staple for us is really thelahty, but try to go out to the shelf, and you won't find it anymore." (McMullin, 2005)

Some diets, such as the Wai'anae Diet and later modifications, including Dr. Shintani's Eat More, Weigh Less diet, feature the substitution of more readily available high glycemic index, low fat and low sodium foods in place of traditional foods (Shintani, 1993, 1999). These substitutions, however, remove eating from its cultural context: there is no genealogy in brown rice or tofu. Restoring the Lahui requires a restoration of self-sufficiency in foods, particularly indigenous foods. Even for non-traditional Maoli, the opportunity to participate in a traditional production and consumption economy may invoke relatively dormant traditional norms, and link to improved self-identity as health improves.

Landscapes

A reconstruction project could involve reclaiming landscapes, including those areas long inscribed into the colonial matrix. One such area might be Waikiki, and could start with the resacralizing areas which have been desecrated. La Pietra, now an exclusive school for girls, is built on the site of Papa'ena'ena, formerly a surfing and *luakini heiau* (Kanahele, 1995; Hibbard and Franzen, 1986). While the current property regime makes such transformations

difficult, implementing Sai's research into the invalidity of land transfers since the overthrow may open up many *wahi pana* and *wahi kapu*. Rededicating heiau destroys the reifications between *ka wa mua*, *ka wa nei* and *ka wa hope*; time becomes cyclical again. Such acts would transgress the existing production of meaning, to foreground a cosmology of re/production and genealogy. In such a context, surfing would become again, for some people, an act which acknowledges connections between the Maoli and the kai, not simply a sport or pastime.

Other transgressive acts could be the reclamation of land currently in cultivation for luxury housing or golf courses to traditional agriculture or other traditional practices. Restoration of forests would in turn help to restore rapidly-depleting aquifers. Beaches, instead of being dedicated to human tourist uses, could again be viewed as part of the flow of *mana*, in terms of the need for the sand to flow back and forth as the tide changes. In Waikiki, such a project would require the destruction of the breakwaters and groin. Here, destruction would be re/constitution, as the restoration of sand flow would restore the surf to patterns last seen by Duke Kahanamoku, who was famously able to ride a single wave for more than one mile. The re/constitution could help to restore a sacred landscape, as the surf would again link to Papa'ena'ena.

Case Studies

Loko i'a

As Maoli have struggled over the identity of the "unhealthy Hawaiian", they have also struggled over the means of production, which on a concrete level are also the means of production of the healthy Maoli. A visible aspect of this struggle are the *loko i'a*, or fishponds. Nowhere else in the Pacific was aquaculture as developed as in Ka Pae 'Aina (Farber, 1997; Hlawati, 2002). The loko i'a was a protected hatchery for certain fish, and served as a storehouse for fish when they were otherwise unavailable (Summers, 1964). Fishponds ranged from small freshwater lokowai to extremely large "royal fishponds:" the *loko kuapa*, *loko pu'uone*, and *lokowai* (Greene, 1993). Each loko was under the management of the local *konohiki*, who managed the area for her or his ali'i. The fishponds largely provided resources for the ali'i

of that area, rather than the *maka'ainana* (Apple and Kikuchi, 1975; Greene, 1993). Kelly (1979) argues, however, that by virtue of their labor on the ponds, *maka'ainana* gained usufructuary rights in the loko which existed until the time of the Mahele. The US Supreme Court has held that under the Mahele, the Monarchy awarded loko as private property, however, the name of only one owner, Kekuanao'a, is recorded (Kaiser Aetna vs. United States, 444 US 164, 167, 1979; Kanahele, 1995). Moreover, the US Supreme Court gives no citations for its statement that the ponds "have always been considered to be private property by landowners and the Hawaiian government" (444 US at 167). Other authors state that fishponds are "indivisible assets," with rights retained to the Government (Kaiser and Roumassett, 2004).

With depopulation, however, Maoli lost much of the means to manage the loko, which were leased to Chinese. Under Chinese management, the ponds were used both for traditional uses, such as the raising of *'awa'awa* and *awa*, but also the goldfish, or *i'a pake*, and introduced species of duck (Kanahele, 1995). The native inhabitants of the loko, the *koloa*, *alae ke'oke'o*, *ae'o* and *'auku'u*, were lost as habitat and hunters intervened (Kanahele, 1995).

Recently, loko have been objects of litigation, with claims to private ownership of ponds, particularly arising out of the Mahele, being heard in courts (Hlawati, 2002). Some property owners insist on individual ownership of loko, and have attempted to rebuild them as commercial ventures (Environment Hawai'i, 1993).

Loko are very much a contested landscape, on a Western legal terrain as well as the terrain of nation-building. Reclamation of Maoli ola and Lahui require the re/production of the means of self-sufficiency, both materially and culturally; this would entail resolving the question of "ownership" of the loko. With the current legal system, they could be constructed as part of the public trust, as they extend over the shoreline, although this is contraindicated by at least one federal district court decision. Alternatively, under the undivided interest theory of Keanu Sai, the ponds have never been completely

alienated, and thus are part of Maoli lands, similar to any other part of Ka Pae 'Aina.

Towards a Theory of Reclamation and Restoration: e 'ao lu'au a kualima

This analysis actively seeks to deconstruct the production of the "unhealthy Hawaiian," and put flesh and bones into that space, to recenter and re-recognize the agency of the Kanaka Maoli in producing their own health. As the opening 'olelo noe'au states, one must offer kalo leaves to the gods five times to seek to restore health (Pukui, 2001). Even without the specific belief structures of the old Maoli religion, foregrounding the embedding of healing within culture is essential to the restoration of Maoli ola. Unlearning is demystifying and denaturalizing the discourse of the "unhealthy Hawaiian," to *kaukau* and recenter the Maoli ola as navigating into the future on the shoulders of her ancestors, observant of the inseparable mind, body and spirit.

One path is that indicated by Cook et al. (2004):

"the way of the warrior, integrating through traditional paths of the warrior, without violence but with strength of spirit, understandings of the traumas which continue to shape the lives of Maoli. Understanding in this practice is not for the acquisition, and thus power over, knowledge, but instead the construction of meanings which bring wisdom to the learners. Wisdom brings an understanding of the pain felt on largely psychic levels, but manifested in the 'unhealthy Hawaiian.' The processes which brought the pain are construed in a discourse aimed at healing, and thus bringing individuals, 'ohana, communities and ultimately the nation to a new path, which is at the same time a very old path: "through engaging in many cycles of insight, forgiveness and wisdom, a person or community can develop options for living a healthy and powerful life . . . [o]ptions are freedom . . . [f]reedom allows for graciousness and peace to emerge." (Cook et al., 2004)

Ultimately, the movement from unhealthy Hawaiian to Maoli ola parallels the process of reclamation and reconstruction of the nation: it

is a process, which begins in ka wa mua, and sails backwards into ka wa hope. Maoli ola requires rekalonization, the reintegration of the body of the Maoli into the body of the nation through revolutionary acts, such as reclamation of diet and land, as well as ultimately health and community. Finally, rekalonization is a process, continued redefined and reclaimed by those who participate in it and who own it: the Maoli.

Loa'a ke ola i Halau a ola (literally, life is found in the house of life, but figuratively, one is happy and well again) (Puku'I, 2001).

*Rise up.
From the roots
to the Gods.
Rise up.
Pass the history
and share the mana'o.
Rise up.
Rise up.
Out of the
ashes of colonial
thinking.
Rise up.
Rise up.
Rise up.
Pass the mana.
Drink the 'awa.
Pai! Pai!
Drink the 'awa.
Rise up
and hold high
our spears.
Rise up.
Rise up.
Rise up.
E ala! Ku'e!*

(Kalahele, 2003, p. 77)

A Timeline

Time immemorial Papahanaumoku and Wakea mate, giving birth to the island of Ka Pae 'Aina, as well as a daughter, Ho'ohokuikalani. Ho'ohokuikalani mates with her father, Wakea and gives birth to Haloanaka, who is stillborn; after being buried, he becomes the first taro. His brother, also Haloa, is the first human. See [Appendix A](#) for the complete timeline. For Glossary, see [Appendix B](#). For a PowerPoint presentation of this paper, see [Appendix C](#).

References

- Aluli, N. E. (1991). Prevalence of obesity in a Native Hawaiian population. *American Journal of Clinical Nutrition*, 53(Suppl.), 1556S-1560S.
- Andermann, L. A. (2002). Cultural aspects of trauma. Retrieved December 1, 2005, from <http://www.cpa-apc.org/Publications/Archives/Bulletin/2002/august/ptsdAndermann.pdf>
- Apple R. A., and Kikuchi W. K. (1975). Ancient Hawaii shore zone fishponds: An evaluation of survivors in historical preservation. Honolulu: National Park Service.
- Arista D. N. M. A. (1998). *David Malo: Ke kanaka o ka huliao/David Malo: A Hawaiian of the time of change*. Master's Thesis, University of Hawai'i, Manoa.
- Bashford, A. (2004). *Imperial hygiene: A critical history of colonialism, national and public health*. Palgrave MacMillan: Houndsmills, Basingstoke, Hampshire, UK.
- Beckwith, M. (1972). *The kumulipo*. 1972: Honolulu, Hawai'i: University of Hawai'i Press.
- Bewell, A. (1999). *Romanticism and colonial disease*. Baltimore, MD: Johns Hopkins University Press.
- Blaisdell, R. K. Culture and cancer in kanaka maoli (Native Hawaiians). (1993). Abstract. *Asian American and Pacific Islander Health*, 1(2), 116-160.
- Blaisdell, R. K. (1999). Ma'i Ōku'u - Ka Pae 'Aina's greatest epidemic: Some persistent controversies and a new one. Ha'ilono. Retrieved December 1, 2005, from http://www.hawaii.edu/nhcoe/Sept99_newsletter.html#burgess
- Blaisdell, R. K. (1996). The meaning of health. *Asian American and Pacific Islander Health*, 4(1-3), 232.
- Blaisdell, R. K. Historical and philosophical aspects of lapa'au traditional kanaka maoli healing practices. In *Motion Magazine*. Retrieved October 25, 2005, from <http://www.inmotionmagazine.com/kekuninf.html>
- Blaisdell, R. K. (2005). I hea na kanaka maoli: Whither the Hawaiians. *Hulili*, 2(1), 9-18.
- Blakely, T., Tobias, M., Robson, B., AjWani, S., Bonne, M., Woodward, A. (2005). Widening ethnic mortality disparities in New Zealand 1981-99. *Social Science and Medicine*, 61, 2233-51.
- Braun, Fong, Kaanoi, Kamaka and Gotay (2005). Testing a culturally appropriate, theory-based intervention to improve colorectal cancer screening among Native Hawaiians. *Preventive Medicine*, 40, 619-27.
- Brecht B. (Nd.). A worker's speech to a doctor. Retrieved November 30, 2005, from <http://disa.nu.ac.za/articledisplaypage.asp?articletitle=A+worker's+speech+to+a+Doctor&filename=FwNov80>
- Bushnell, O. A. (1993). *The gifts of civilization: Germs and genocide in Hawaii*. Honolulu, HI: University of Hawai'i Press.
- Bushnell, O. A. (1995). The antiquarians. *Hawaii Medical Journal*, 54, 765-6.
- Bugianesi, E. (2005). Review article: Steatosis, the metabolic syndrome and cancer. *Aliment Pharmacological Therapies*, 22 (Suppl. 2), 40-3.
- Canoe Plants of Hawai'i. (n.d.). Homepage. Retrieved September 23, 2005, from <http://www.canoeplants.com>
- Cerhan, J. R., Bernstein, L., Severson, R. K., Davis, S., Colt, J. S., Blair, A., Hargte, P. (2005). Anthropometrics, physical activity, related medical conditions, and the risk of non-hodgkin lymphoma. *Cancer Causes Control*, 16, 1203-14.
- Chai, D., Kaluhiokalani, N., Little, J., Hetzler, R., Zhang, S., Mikami, J., Ho, K. (2003). Childhood overweight problem in a selected school district in Hawaii. *American Journal of Human Biology*, 15, 164-77.
- Chang, V. W., Lauderdale, D. S. (2005). Income disparities in body mass index and obesity in the United States, 1971-2002. *Archives of Internal Medicine*, 165, 2122-8.
- Chun, M. N. (1989). *Ka mo'olelo laihni la'au, for e ola mau*. Honolulu.
- Charon, R. L. (2001). Narrative medicine: A model for empathy, reflection, profession and trust. *Journal of American Medical Association*, 286, 1897-1902.
- Chock, E. (2004a). Introduction to lyrics of resistance in the Hawaiian reference. Retrieved November 30, 2005, from <http://socrates.uhwo.hawaii.edu/Humanities/chock/lit484docs/introtolyrics.doc>
<http://socrates.uhwo.hawaii.edu/Humanities/chock/lit484docs/introtolyrics.doc>

- Chock, E. (2004b). Hawaiian nationalism lyrics. Retrieved November 30, 2005, from <http://socrates.uhwo.hawaii.edu/Humanities/chock/lit484docs/nationalism.doc>
- Chock, E. (2004c). Ku'u home o songs. Retrieved November 30, 2005, from <http://socrates.uhwo.hawaii.edu/Humanities/chock/lit484docs/kuuhome.doc>.
- Chock, E. (2004d). Native stereotypes. Retrieved November 30, 2005, from <http://socrates.uhwo.hawaii.edu/Humanities/chock/lit484docs/native.doc>
- Cody, W. J. T. (1974). Psychiatry in Hawaii: A short history. *Hawaii Medical Journal*, 33, 207-210.
- Cook, B. P., Withy, K., Tarallo-Jensen, L., Berry, S. P. (2004). Healing the warrior self – Changes in kānaka maoli men's roles and health. *International Journal of Men's Health*, 2004, 4.
- Crawford, R. (1994). The boundaries of the self and the unhealthy other: Reflections on health, culture and AIDS. *Social Science & Medicine*, 38, 1347–1365.
- Curb, J. D., Aluli, N. E., Kautz, J. A., Petrovitch, H., Knutsen, S. F., Knutsen, R., O'Conner, H. K., O'Conner, W. E. (1991). Cardiovascular risk factor levels in ethnic Hawaiians. *American Journal of Public Health*, 81, 164–167.
- D. A. (2005). Da' Hawaii web site: Hawaiian music lyrics: The power of words in Hawaiian songs. Retrieved December 22, 2005, from <http://www.geocities.com/dhc2020/powerofthewords.htm>
- Department of Native Hawaiian Health, University of Hawai'i John A Burns School of Medicine. (2005). Homepage. Retrieved November 2, 2005, from <http://www.dnhh.hawaii.edu/Home.asp?tab=Home>
- Dinstell S. (2000). The Hawaiian home lands. Retrieved November 6, 2005, from <http://uvalde.tamu.edu/rangel/oct00%5Cdinstell.pdf>
- Drewnowski, A., Darmon, N. (2005). The economics of obesity: Dietary energy density and energy cost. *American Journal of Clinical Nutrition*, 82(Suppl.), 265S-273S.
- Eaton, K. (2005). Number of cases on the rise. Retrieved August 13, 2005, from <http://westhawaii.com/articles/2005/08/02/local/local02.txt>
- Engel, G. L. (1977). The need for a new medical model: The challenge for biomedicine. *Science*. 196(4286), 129-36.
- Environment Hawai'i. (2005). Corps of Engineers nears decision on controversial Moloka'i fishpond. *Environment Hawai'i* 3(8), Retrieved November 7, 2005, from <http://www.environment-hawaii.org/293corps.htm>
- Eyerman, R. (2002). Cultural trauma: Slavery and the formation of African-American identity. In J. C. Alexander, R. Eyerman, B. Giesen, N. J. Smelser, P. Sztomper, *Cultural trauma and collective identity*. Berkeley, Ca: University of California Press.
- Faludi, S. (1991). How everyone got Hawaiians' homelands except the Hawaiians. *Wall Street Journal*. September 9, 1991 (western ed.), A1.
- Farrell, B. H. (1982). *Hawaii: The legend that sells*. Honolulu, HI: University of Hawai'i Press.
- Foucault, M. (1975). *The birth of the clinic: An archeology of medical perception* (A. M. S. Smith translation). NY: Vintage Books.
- Foucault, M. (1994). *The order of things: An archaeology of the human sciences*. Trans. Sheridan-Smith, A. Vintage Books.
- Freedland, S. J. (2005). Obesity and prostate cancer: A growing problem. *Clinical Cancer Research*, 2005, 11(19 Pt. 1), 6763-6.
- Frezza, E. F., Wachtel, M. S., Chiriva-Internati, M. (2005). The influence of obesity on the risk of developing colon cancer. *Gut*, Oct 20.
- Good, B. J., Good, M. J. (2000). "Fiction" and "historicity" in doctors' stories. In C. Mattingly and L. C. Garro (Eds.), *Social and narrative dimensions in learning medicine. Narrative and cultural construction of illness and healing*. Berkeley: University of California Press
- Glanz, K., Croyle, R. T., Chollette, V. Y., Pinn, V. W. (2003). Cancer-related health disparities in women. *American Journal of Public Health*, 93, 292-8.
- Goldstein, J., Jacoby, E., Del Aguila, R., Lopez, A. (2005). Poverty is a predictor of non-communicable disease among adults in Peruvian cities. *Preventive Medicine*, 41, 800-6.

- Gordon, D. (2003). A sword of empire? Medicine and colonialism at King William's Town, Xhosaland, 1856-91. In M. P. Sutphen and B. Andrews (Eds.), *Medicine and colonial identity*. New York : Routledge.
- Greene, L. W. (1993). A cultural history of three traditional Hawaiian sites on the west coast of Hawai'i Island. Denver: United States Department of Interior. Retrieved November 14, 2005, from http://www.cr.nps.gov/history/online_books/kona/historyt.htm
- Greer, R. (2000). Dousing Honolulu's red lights. *Hawaiian Journal History*, 34, 185-202.
- Hawai'i Advisory Committee on Civil Rights. (1980). Breach of trust? Native Hawaiian homelands: A summary of the proceedings of a public forum sponsored by the Hawai'i advisory committee to the U.S. Commission on civil rights.
- Hawaii Agricultural Research Center. (2005). Hawaii's Sugar Industry. Retrieved November 30, 2005, from <http://www.hawaiiag.org/harc/HARCHS11.HTM>
- Hawaii Agriculture Gateway. (2005). Some history of Hawaii agriculture. Retrieved November 30, 2005, from <http://www.hawaiiag.org/history.htm>
- Hawaii State Department of Health. (2004). Hawaii cancer facts and figures, 2003-04. (2004). Retrieved November 30, 2005, from <http://www.hawaii.gov/health/statistics/other-reports/cancer2003-04.pdf>
- Hayes, D. F. (2005). Prognostic and predictive factors revisited. *Breast*. In Press.
- Hlawati, I. H. (2002). Loko i'a: A legal guide to the restoration of Native Hawaiian fishponds within the western paradigm. 24 *University of Hawaii Law Review*, 657-692.
- Hofferth, S. L., Curtin, S. (2005). Poverty, food programs, and childhood obesity. *Journal of Policy Analysis and Management*, 24, 703-26.
- Hope, B. E., and Hope, J. H. (2003). Native Hawaiian health in Hawaii: Historical highlights. *Californian Journal of Health Promotion*, 1 (Special: Hawaii), 1-9.
- Housa, D., Housova, J., Vernerova, Z., Haluzik, M. (2005). Adipocytokines and cancer. *Physiological Research*, In Press.
- Hughes, C. K. (2005). Factors associated with health-seeking behaviors of Native Hawaiian men. *Pacific Health Dialog*, 11(2), 176-182.
- Inglis, K. A. (2005). Kokua and 19th century Hawaiian disease: Exploring concepts of health disease and medicine in 19th century Hawai'i. *Hulili*, 2(1), 215-237.
- James L. (1985). Affective and cognitive resistance to a more healthy lifestyle. Retrieved September 10, 2005, from <http://www.soc.hawaii.edu/leonj/leonj/leopsy/instructor/health1.html>
- Jane's Oceania. (April 6, 2005). The Hawaiian hula, Part three. Retrieved August 13, 2005, from http://www.janesoceania.com/hawaii_hula1
- Johnson, D. B., Oyama, N., LeMarchand, L., Wilkens, L. (2005). Native Hawaiians mortality, morbidity and lifestyle comparing data from 1982, 1990 and 2000. *Pacific Health Dialog*, 11(2), 120-130.
- Judd, C. S. (1984). Leprosy in Hawai'i, 1889-1976. *Hawaii Medical Journal*, 43(9), 328-334.
- Kaiser, B., and Roumassett, J. (2004). Coasean economics and the evolution of marine property in Hawaii. Retrieved November 30, 2005, from http://www.economics.hawaii.edu/research/seminars/03-04/04_16_04.pdf
- Kalaehele, I. (2002). *Kalaehele: Poetry and art*. Honolulu, HI : Kalamaku Press.
- Kame'eleihiwa. L. (1992). *Native lands and foreign desires: Pehea La e Pono Ai?* Honolulu, HI: Bishop Museum Press.
- Kamakau, S. M. (1964). *Ka po'e kahiko: The people of old*. Honolulu, HI: Bishop Museum Press.
- Kamakau, S. M. (1992). *Ruling chiefs of Hawai'i (Rev ed.)* Honolulu, HI: Kamehameha Schools Press.
- Kamakau, S. M. (1996). *Ke kumu 'aupuni*. Honolulu, HI: Ke Kumu Lama, 'Ahahui 'Olelo Hawai'i.
- Kanahele, G. S. (1979). *The Hawaiian renaissance*. Retrieved September 23, 2005, from <http://kapalama.ksbe.edu/archives/PVSA/primary%202/79%20kanahele/kanahele.htm>
- Kanahele, G. K. (1986). *Ku kanaka, stand tall: A search for Hawaiian values*. Honolulu, HI: University of Hawai'i Press.
- Kanahele, G. K. (1995). *Waikiki 100 BC to 1900 AD: An untold story*. Honolulu, HI: Queen Emma Foundation.

- Ka'opua, L. S., Mitschke, D., and Lono, J. (2005). Increasing participation in cancer research: insights from Native Hawaiian women in medically underserved communities. *Pacific Health Dialog* 11(2), 170-175.
- Kekaha, Kaho'ohanohano, Kalama, S. P. (1986). *He buke lapa'au* (Translation by M. N. Chun). Honolulu, HI: Bess Press.
- Kelly, M. (1979). *Loko kuapa o Hawai'i nei*. *Historic Hawai'i News* 5(4), 1,6.
- Kimmich, R. A. (1956). 100 years of Hawaiian psychiatry. *Hawai'i Medical Journal*, 15, 345-7.
- Kingdom of Hawaii. (1848). Act relating to the lands of his majesty the king and of the government (June 7, 1848), Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands 22 (1848), reprinted in 2 Revised Laws of Hawaii app. At 2142-76 (1925)
- Kingdom of Hawai'i. (1850). 3B Privy Council Record, 681, 713.
- Kingdom of Hawai'i. (1850). *Kanawai Hoopai Karaima no ko Hawaii Pae Aina*.
- Kingdom of Hawai'i. (1875). Treaty of reciprocity between the United States of America and the Hawaiian Kingdom. Retrieved September 22, 2005, from <http://www.hawaii-nation.org/treaty1875.html>
- Kleinman, A. (1995). *Writings at the Margin: Discourse between Anthropology and Medicine*. Berkeley, CA: University of California Press.
- Kuakini Medical Center. (n.d.). History. Retrieved September 2, 2005, from http://www.kuakini.org/GeneralInfo/gen_History.asp
- Lasseter, J. H., Baldwin, J. H. (2005). Improving the experience of hospitalization for Hawaiian children on the mainland through cultural sensitivity to Hawaiian ways of healing. *Journal of Pediatric Nursing*, 20(3), 170-179.
- Local Kine Recipes V 2.0. (2005). Homepage. Retrieved October 25 2005, from <http://www.hawaii.edu/recipes/>.
- Loomba, A. (1998). *Colonialism/postcolonialism*. Oxford: Routledge.
- Luomala, K. (1989). Polynesian religious foundations of Hawaiian concepts regarding wellness and illness. In L. E. Sullivan (Ed), *Healing and restoring: Health and medicine in the world's religious traditions*. New York: Macmillan.
- Lyotard, J-F. (1993). *The postmodern condition: A report on knowledge*. (Translation G. Bennington and B. Massumi). Minneapolis, MN: University of Minnesota Press.
- MacPherson, C. (1995). Samoan medicine. In C. D. F. Parsons (Ed.), *Healing practices in the south pacific*. La'ie, HI: Institute for Polynesian Studies.
- Malo, D. (1951). *Hawaiian antiquities* (N. B. Emerson translation). Honolulu, HI: Bishop Museum Press.
- Mau, M. K., Glanz, K., Serverino, R., Grove, J. S., Johnson, B., Curb, J. D. (2001). Mediators of lifestyle behavior change in Native Hawaiians: Initial findings from the Native Hawaiian diabetes intervention program. *Diabetes Care*, 24, 1770 – 1775.
- McMullin, J. (2005). The call to life: Revitalizing a healthy Hawaiian identity. *Social Science Medicine*, 61, 809-20.
- Mills, G. H. (1981). Hawaiians and medicine. *Hawaii Medical Journal*, 40(10), 272-6.
- Morris, D. B. (1998). *Illness and culture in the postmodern age*. Berkeley, CA: University of California Press.
- Native Hawaiians Study Commission (U.S.). (1983). Report on the culture, needs and concerns of Native Hawaiians pursuant to public law 96-565, title III. Washington, D.C.: The Commission, 1983. 2 vols. See Vol. 1, Pt. 2: Federal, State, and Local Relationships-Land Law and Relationships, pp. 251-264. Vol. 2 has special title: Claims of conscience: a dissenting study of the culture, needs and concerns of Native Hawaiians.
- Neal, A. G. (1998). *National trauma and collective memory: Major events in the American society*. Armonk, NY: M. E. Sharpe.
- Papa Ola Lokahi. (n.d.). Homepage. Retrieved November 30, 2005, from <http://www.nativehawaiianhealth.net/>
- Perry, B. D. (1999). Memories of fear: How the brain stores and retrieves physiologic states, feelings, behaviors and thoughts from traumatic events. Retrieved November 30, 2005, from <http://www.childtrauma.org/CTAMATERIALS/memories.asp>

- Perry, B. D., and Azad, I. (1999). Post-traumatic stress disorders in adolescents and children. *Current Opinions in Pediatrics*, 11; 4. Retrieved November 30, 2005, from http://www.childtrauma.org/ctamaterials/PTSD_opin6.asp
- Perry, B. D. (2001). The neurodevelopmental impact of violence in childhood. In D. Schetky & E. Benedek (Eds.), *Textbook of child and adolescent forensic psychiatry*. Washington, D.C.: American Psychiatric Press, Inc. (pp. 221-238). Retrieved November 30, 2005, from http://www.childtrauma.org/CTAMATERIALS/Vio_child.asp
- Pollard, A. (n.d.). Local kine recipes v2.0. Retrieved November 2, 2005, from <http://www.hawaii.edu/recipes/>
- Porges, S. W. (1994). Emotion: An evolutionary by-product of the neural regulation of the autonomic nervous system. In C. S. Carter (Ed.), *Integrative neurobiology of affiliation*.
- Prendergast, E. K. W. (1895). Kaulana na pua/famous are the flowers. In S. H. Elbert and N. Mahoe (Eds.), *Na mele o Hawai'i nei*. Honolulu, HI: University of Hawai'i Press.
- Pukui, M. K., and Elbert, S. H. (1986). *Hawaiian dictionary: Hawaiian-English and English-Hawaiian*. Honolulu, HI: University of Hawai'i Press.
- Pukui, M. K., Haertig, E. W., and Lee, C. A. (1972). *Nana i ke kumu: Look to the source. vol I*. Honolulu, HI: Hui Hanai.
- Pukui, M. K., Haertig, E. W., and Lee, C. A. (1979). *Nana i ke kumu: Look to the source. vol II*. Honolulu, HI: Hui Hanai.
- Pukui, M. K. (2001). *'Olelo noe'au*. Honolulu, HI: Bishop Museum Press.
- Osorio, J. K. K. (2002). *Disemembering lahui: A history of the Hawaiian nation*. Honolulu, HI: University of Hawai'i Press.
- Perkins, U. (2005). 'O ka 'aina ke ea: The Waitangi tribunal and the Native Hawaiians study commission. *Hulili*, 2(1), 195-213.
- Queen's Medical Center. (n.d.). Biography of King Kamehameha IV. Retrieved September 10, 2005, from <http://www.queens.org/about/kingbio.html>
- Ralston, C. (1989). Changes in the lives of ordinary women in early post-contact Hawaii. In M. Joly and M. Macintyre (Eds.), *Family and gender in the Pacific: Domestic contradictions and the colonial impact*. Cambridge: Cambridge University Press.
- Rapp, K., Schroeder, J., Klenk, J., Stoehr, S., Ulmer, H., Concin, H., Diem, G., Oberaigner, W., Weiland, S. K. (2005). Obesity and incidence of cancer: a large cohort study of over 145,000 adults in Austria. *British Journal Cancer*. Oct 18, In Press.
- Santos, J. (n.d.). Ku'u home o kahalu'u. retrieved November 30, 2005, from http://www.tropicalstormhawaii.com/cgi-bin/view.cgi?pid=song&song=lj/kuu_home_o_kahaluu.txt
- Scaer, R. C. (2001). Neurophysiology of disassociation and chronic disease. *Applied Psychophysiology and Biofeedback*, 26, 73-91.
- Schmitt, R. C. (1949). Hawaii's first hospitals. *Hawaii Medical Journal*, 8(6), 424-7.
- Schmitt, R. C. (1956). Hawaii's hospitals, 1831-1956. *Hawaii Medical Journal*, 15(4), 338-41.
- Schmitt, R. C. (1970). The okuu--Hawaii's greatest epidemic. *Hawaii Medical Journal*, 29(5), 359-64.
- Schmitt, R. C. (1975). Health personnel in Hawaii, 1820-1974. *Hawaii Medical Journal*, 34(2), 53-5.
- Schmitt, R. C. (1967). Differential mortality in Honolulu before 1900. *Hawaii Medical Journal*, 26(6), 537-41.
- Schmitt, R. C. (1995). Medical progress in a remote archipelago. *Hawaii Medical Journal*, 54(11), 768-9.
- Schore, A. N. (2001). Effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22, 201-269.
- Shintani, T. T., Hughes, C. K., Beckham, S., and O'Connor, H. K. (1991). Obesity and cardiovascular risk intervention through the ad libitum feeding of traditional Hawaiian diet. *American Journal of Clinical Nutrition*, 53(Suppl.), 1647S-51S.
- Shintani, T. T. (1993). *Dr Shintani's eat more, weigh less diet*. Honolulu, HI: Kinetic Systems Corporation.
- Shintani, T. T. (1999). *Dr Shintani's Hawai'i diet*. NY: Pocket Books.

- Smith, P. M. (2003). New Zealand mill for 'building Britons'. In M. P. Sutphen and B. Andrews B (Eds.), *Medicine and colonial identity*. New York: Routledge.
- Stamm, B. H., and Stamm, H. E. (2005). Project for community revitalization and healing of trauma in indigenous peoples. Retrieved November 30, 2005, from <http://www.isu.edu/~bhstamm/ct/presenters.htm>
- Stannard, D. E. (1989). *Before the horror: The population of Hawaii on the eve of western contact*. Honolulu, HI: University of Hawaii Press.
- State of Hawai'i. (n.d.). Hawai'i revised statutes. Retrieved October 15, 2005, from <http://www.capitol.hawaii.gov/site1/docs/docs.asp?press1=docs>
- Stewart, M. A., Brown, J. B., Weston, W. W., McWhinney, I. R., McWilliam, C. L., Freeman, T. R. (1995). *Patient-centered medicine: Transforming the clinical method*. London: Sage Publications.
- Strom, S. S., Wang, X., Pettaway, C. A., Logothetis, C. J., Yamamura, Y., Do, K. A., Babaian, R. J., Tronsco, P. (2005). Obesity, weight gain, and risk of biochemical failure among prostate cancer patients following prostatectomy. *Clinical Cancer Research*, 11, 6889-94.
- Summers, C. (1964). *Hawaiian fishponds*. Honolulu, HI: Bishop Museum Press.
- Tabrah, F. L., Eveleth, B. M. (1966). Evaluation of the effectiveness of ancient Hawaiian medicine. *Hawaii Medical Journal*, 25(3), 223-30.
- Tsark, J. U. (1998). Cancer in Native Hawaiians. *Pacific Health Dialog*, 5(2), 315-326.
- United Nations Economic and Social Council. (n.d.). The right to the highest attainable standard of health. E/C.12/2000/4 general comment of the UN Economic and Social Council. Retrieved November 13, 2005, from <http://www.un.org/documents/ecosoc/docs/2001/e2001-22.pdf>
- United Nations Office of the High Commission for Human Rights. (n.d.). Universal declaration of Human rights. Retrieved October 27, 2005, from <http://www.unhchr.ch/udhr/lang/eng.htm>
- UN OHCHR. (1976). International covenant on economic, social, and cultural rights. Retrieved October 27, 2005, from http://www.unhchr.ch/html/menu3/b/a_cescr.htm
- UN OHCHR. (1981). Convention on elimination of all forms of discrimination against women. Retrieved October 27, 2005, from <http://www.unhchr.ch/html/menu3/b/e1cedaw.htm>
- World Health Organization. (2005). Declaration of alma ata. Retrieved October 27, 2005, from http://www.euro.who.int/AboutWHO/Policy/20010827_1
- University of Hawaii. (2005). Hawaiian salt-water fishponds homepage. Retrieved November 30, 2005, from <http://oe.ore.hawaii.edu/~fishpond/>
- University of Hawai'i, John A Burns School of Medicine. (2005). History and background. Retrieved October 2, 2005, from <http://hawaiiimed.hawaii.edu/about/history.html>
- Vause, M. M. (1962). *The Hawaiian homes commission act, 1920: History and analysis*. M.A. Thesis. University of Hawai'i, Honolulu.
- Wikipedia: Plate lunch. (n.d.). Retrieved October 25, 2005, from http://en.wikipedia.org/wiki/Plate_lunch
- Wong, R. T. (1994). Hawaiian medicine. *Hawaii Medical Journal*, 53, 358-59.

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Appendix A

Hawaiian Timeline

Year(s)	Historical Event(s)
0-500	First Polynesian settlers bring pigs, chicken, kalo, 'ape, 'ulu, 'uala, 'uhi, niu, olona, pia, ki, ko, kou, kukui, mai'a, milo, noni, 'ohe, 'ohi'a 'ai, and wauke to Ka Pae 'Aina. They brought a system of governance based on the 'ohana, a decentralized, self-sufficient system.
1100s-1300s	Pa'ao arrives, bringing, together with the ali'i Pilika'aiea, the heiau luakini, where human sacrifices were made; the pulo'olo'o, the kaili, and the kapu moe. This stratified chiefly system overtakes the existing 'ohana-based system.
1778	Arrival of Captain Cook and crew; introduction of STDs, and other infectious disease. Cook also brings English sow and boar.
1790	Sandalwood trade begins.
1792	Foreigners bring orange to Ka Pae 'Aina.
1793	Vancouver brings the first cattle. Initially, Kamehameha Nui places kapu on the slaughter of cattle, which is later removed in 1830 as cattle have grown to the extent of being a nuisance.
1800s	Westerners introduce tuberculosis, measles, influenza, cholera, gastroenteritis, mumps, scarlet fever, dengue, bubonic plague, scabies and other infectious diseases.
1804	First accounts of <i>ma'i oku'u</i> (cholera)
1813	Don Francisco de Paula y Marin introduces coffee and pineapple.
1819	Kamehameha Nui dies. Liholiho, Ke'opuolani, and Ka'ahumanu perform 'ainoa, which breaks the 'aikapu, setting in motion destruction of state religion.
1820	First company of American Congregational missionaries, under direction of American Board of Foreign Missions, arrives from northeast US. First resident foreign physician, missionary Dr Thomas Holman arrives at Kailua-Kona.
1824	First mango tree introduced.
1827	Mosquitoes arrive in Hawai'i aboard Western ships.
1830	Two Western physicians present in Hawai'i
1833	British Hospital for Seamen, which was simply rented house.
1835	First case of Hansen's (<i>ma'i ho'oka'awale</i>) disease identified on Kaua'i.
1836	Kuhina Nui Kina'u orders screening of all visiting ships for small pox.
1837	US consul establishes hospital at Waikiki for American seamen. Ship Quixote arrives in Honolulu harbor, etiology of mumps epidemic lasting until 1839.
1838	Infant mortality rate approaches 50%.
1839	Kamehameha III enacts Boards of Health for each island, and enacts Vital Statistics Act. Bill of Rights passed, establishing that although the lands of Ka Pae 'Aina belonged to the King, the land was not held as private property; instead, the land was managed in common by the King, ali'i and maka'ainana. Additionally, first forestry law regulating cutting of sandalwood.
1840	Six Western physicians present in Hawai'i (Schmitt, 1974).
1840	First Kanaka Maoli diagnosed with Hansen's disease by Dr David Baldwin on Maui.
1841	Queen Kapi'olani dies after apparently successful mastectomy, performed without anesthesia.
1841	Real British Hospital for Seamen established, which adjoined tavern.
1843	US establishes hospital in Lahaina. Lord George Paulet of the British Navy made demands on Kauikeaouli based on the claims of the English counsel. Kauikeaouli was unable to meet these demands, and subsequently the sovereignty of the Kingdom was ceded temporarily to Britain in February. Subsequently, Admiral Thomas, commander of the British Navy in the Pacific, restores the sovereignty of the Kingdom after determining that Paulet's actions were illegal, on July, 31, 1843. Kauikeaouli utters what is to become the motto of the Kingdom, "ua mau ke ea o ka 'aina i ka pono." Britain and France sign Anglo-French proclamation, recognizing the independence of the Kingdom.
1844	Land Commission established, which was to hear claims arising from the Mahele.
1845	French establish hospital for seamen in Honolulu.
1846	Denmark recognizes independence of Kingdom through treaty.
1845-49	California gold miners bring influenza to Hawai'i.
1846	Forests are declared governmental property. Little Greenwich Hospital established by British Consul General in Pauoa Valley.

Year(s)	Historical Event(s)
1848	Ship Independence introduces measles and pertussis to Hawai'i, with resulting 50% infant mortality.
1848	British Hospital moves again, and eventually closes with insufficient patients to maintain hospital.
1849	US and Kingdom sign Treaty recognizing the independence of the Kingdom on December 20, 1849.
1849	51 production of export crops, including Irish and sweet potatoes, onions, pumpkins, oranges, molasses, and coffee rises in response to high demand from gold rush on west coast of continental US.
1850	Kingdom established Department of Health. Kuleana Act passed, enabling maka'ainana to own portions of land claimed under the Mahele by ali'i or konohiki.
1850	55 Land Commission established to hear claims arising under the Kuleana Act awards 8,421 claims, totaling 30,000 acres, to approximately 10,000 maka'ainana. Maka'ainana were allowed to claim only lands that they actually cultivated, and were not allowed to claim "wastelands" such as fishponds, nor lands cultivated with the seeming intention of expanding their claims.
1851	Drs. S. Porter Ford and George A. Lathrop opened "Hydrop establishment" in Nu'uuanu.
1853	First smallpox epidemic.
1852	Arrival of first contract workers.
1853	Seventeen Western physicians practicing in Kingdom.
1853	Dr. Ford opens City Hospital.
1855	Kamehameha IV establishes "Act to Institute Hospitals for the Sick Poor" at Honolulu and Lahaina.
1855	Seamen's Hospital established by US Consul in Hilo, charged 1.25 per day. Closed in 1863 with decline of whaling industry.
1856	Hawaiian Medical Society established.
1858	First experimentation with rice growing.
1859	Queen's Hospital founded in Honolulu, and King and Queen begin fundraising drive.
1859	Licensing for foreign physicians initiated.
1860	Cornerstone of new Queen's Hospital laid.
1861	Second smallpox epidemic.
1861	United States Civil War; demand for sugar and rice in US rises in response to cutoff of supply from American South.
1862	Legislation to enable institution for care of people with mental illness passed.
1862	First commercial rice harvest. Kingdom and Belgium sign treaty.
1863	Kamehameha IV dies from CVA at age of 29.
1865	Kamehameha V ascends to throne.
1865	Act to Prevent the Spread of Leprosy, set aside Kalaupapa to isolate people with Hansen's Disease.
1865	Kahili Hospital on O'ahu opened as receiving facility for patients with Hansen's disease.
1865	Licensing for all physicians required by Kingdom. This licensing includes licensing for traditional practitioners.
1866	Kingdom opens Kalaupapa Settlement as colony for patients with Hansen's disease. Also, Kingdom opens O'ahu Insane Asylum, first physician Dr. Ford.
1867-73	Dr. Edward Hoffman serves as physician for O'ahu Insane Asylum.
1868	First Japanese plantation workers arrive.
1870	Dr J P Judd starts first medical school and publishes Hawaiian language anatomy textbook. School enrolls ten Kanaka Maoli students, who graduate and are licensed in 1872. Medical school dissolved after the death of Dr Judd.
1871	Japan and Kingdom sign treaty in Edo.
1872	Kamehameha V dies.
1873	Third smallpox epidemic.
1873	Lunalilo elected as monarch and dies in same year from tuberculosis.
1874	Kalakaua elected monarch.
1875	Kingdom and the Austrian-Hungarian Empire sign a treaty recognizing the independence of the Kingdom.

Year(s)	Historical Event(s)
1876	Reciprocity Treaty signed between Kingdom and United States, allowing duty-free importation of Hawaiian agricultural products into US in return for agreement to not allow lease or other use of ports, harbors or territories within the Kingdom. The US Senate subsequently adds a clause giving US vessels exclusive access to Pearl Harbor, as well as the establishment of a naval base there for coaling and repair. Kalakaua and US argue that Kingdom jurisdiction is preserved. The Treaty is subsequently amended in 1884, extending duration of agreement from 1887-1894.
1881	Long Branch, first bathhouse in Waikiki at Ulukou, established by James Dodd.
1879	Kalakaua again attempts to encourage traditional healing practices with governmental licensing, principally <i>lomilomi</i> and <i>la'au lapa'au</i> . First artesian wells drilled for sugar cultivation. Kingdom and Germany sign treaty in Berlin.
1881	Branch Leper Hospital established at Kaka'ako.
1880s	At Makaweli and Kilauea on Kaua'i, plantation hospitals established.
1881	Smallpox Hospital opens, closed by 1882.
1882	Fourth smallpox epidemic. Chinese Exclusion Act stops the immigration of Chinese into the Kingdom. Sugar planters found Planters' Labor and Supply Company, which was later to become the Hawaii Sugar Planters' Association in 1895. Kingdom becomes a member of the International Postal Union.
1884	Kingdom established Malulani Hospital at Wailuku, Maui.
1884	Kingdom census indicates 29 physicians and surgeons, four dentists, nine nurses, two veterinarians, and 23 pharmacists; no Kanaka Maoli or Chinese healthcare professionals.
1887	Lorrin Thurston, other missionary descendents and non-Maoli businessmen organize Honolulu Rifles, and force Kalakaua at gunpoint to sign "Bayonet Constitution," effectively disenfranchising a large segment of the citizens of the Kingdom, as well as installing a majority of the pro-annexationists as Cabinet ministers.
1888	Koloa Cottage Hospital founded on Kaua'i. First beachside hotel in Waikiki, Park Beach Hotel, opened.
1890	Kapi'olani Maternity and Gynecological Hospital founded at Makiki and Beretania Sts. by 'Ahahui Ho'ola me Ho'oulu Lahui. Queen Kapi'olani and King Kalakaua led the movement to fund the Home because of their concern of high Maoli infant mortality. The 'Ahahui was composed of women, who ran the Home until the 1920s, when they began to lose control to non-Maoli Western physicians and businessmen.
1890s	Plantation hospitals established at 'Ewa, Waialua, Waipahu and 'Aiea on O'ahu, at Pa'auilo, Haina and Ola'a on Hawai'i island.
1889	Kalaupapa population reaches peak of 1,213 patients.
1890	Exports of more than 10 million pounds of rice.
1891	Kalakaua dies of tuberculosis in San Francisco, California, US; Lili'uokalani elected as monarch.
1892	Licensing for dentists initiated.
1893	<p>Small group of businessmen, with assistance of US counsel, USS Boston and US marines, under the orders of US President Benjamin Harrison, forces Lili'uokalani to step down from the throne, until such time as the US recognized the wrong committed and corrected its actions. Despite the findings of former US Senator James Blount, who determined that the US had committed what US President Grover Cleveland characterized as an "act of war", the US fails to withdraw and restore the sovereignty of the Kingdom. At that time, Cleveland stated:</p> <p>but for the lawless occupation of Honolulu under false pretexts by the United States forces, and but for Minister Stevens' recognition of the provisional government when the United States forces were its sole support and constituted its only military strength, the queen and her government would never have yielded to the provisional government . . .</p> <p>By an act of war, committed with the participation of a diplomatic representative of the United States and without authority of Congress, the government of a feeble but friendly and confiding people has been overthrown. A substantial wrong has thus been done which a due regard for our national character as well as the rights of the injured people requires we should endeavor to repair.</p>

Year(s)	Historical Event(s)
1894	Provisional Government proclaims "Republic" of Hawai'i, despite limited franchise; US quickly recognizes "Republic," but is unable to pass annexation through the Senate, as Constitution requires. Robert Wilcox and other royalists lead counter-revolution against the Americans and other counter revolutionists. Patriots are captured, sentenced to death, and later had their sentences commuted after prison terms. Queen Lili'uokalani also tried for "treason," convicted and sentenced to five years of prison and a fine. She spent eight months confined to 'Iolani Palace.
1896	Census reports 8,485 Kanaka Maoli, 22,438 Europeans, and 47,078 Asians.
1897	Hawaiian patriotic organizations, Hui Aloha 'Aina and Hui Kalai 'Aina successfully organize Ku'e petitions, signed by a majority of the Maoli population, including other citizens of the Kingdom; the presentation of these documents to the US Senate, together with lobbying by Maoli, help persuade Senate not to ratify annexation. Hilo Memorial Hospital founded. Seventy six licensed physicians and surgeons in Hawai'i, including one Chinese and several Japanese; no Maoli.
1898	Annexation of Hawai'i "ratified" through Joint Resolution of US Congress, bypassing constitutionally mandated 2/3 majority vote of both houses. US Army establishes precursor of TAMC on O'ahu, and US Army establishes Camp McKinley in Kapi'olani Park.
1899	Bubonic plague epidemic in Chinatown, Honolulu; burning of affected houses uncontrolled, with resulting fire producing \$1.5 million in damages.
1899	Ka Pae 'Aina becomes third-largest exporter of rice in occupied United States.
1900	Territory of Hawai'i established.
1900	Japanese Charity Hospital founded in Kapalama.
1902	Le'ahi Hospital founded for care of patients with tuberculosis.
1902	Japanese Charity Hospital moves to 40 bed hospital.
1903	Licensing for pharmacists required.
1907	Tripler Hospital founded. Rice was planted in more than 9,700 acres, and 42 million pounds of rice were produced.
1909 or 1920	Scholfield Barracks hospital unit opened.
1909	Kauikaouli Children's Hospital opens.
1910	Maui County Farm and Sanatorium at Kula, Maui founded for care of patients with tuberculosis.
1912	Pu'umaile Hospital at Hilo, Hawai'i founded for care of patients with tuberculosis.
1917	Samuel Mahelona Hospital founded at Kapa'a, Hawai'i for care of patients with tuberculosis.
1917	Japanese Charity Hospital moves to Kalihi and becomes the Japanese Hospital.
1917	Nurses required to become licensed.
1919	Hawai'i Medical Board begins to license kahuna. Registration requires practitioners to use Western scientific names for traditional medicinal plants. Waimano Home, later Waimano Training School and Hospital established for developmentally disabled.
1921	US passes Hawaiian Homes Act for the rehabilitation of Maoli of 50% or more blood quantum. Fishing rights for residents of Kalapana also gain protection under US law.
1923	Shriner's Hospital for Crippled Children established, then moves to present site in Makiki.
1927	St Francis Hospital established.
1930	Territorial Hospital moves to windward O'ahu, later to become Hawai'i State Hospital.
1931	Japanese Hospital Nursing School founded.
1932	Japanese Home of Hawai'i founded, a nursing home at Japanese Hospital.
1938	Hawaii Mental Health Clinic established as pilot project at Queen's Hospital; it functions until 1939.
1939	Bureau of Mental Hygiene established under Territorial Board of Health.
1941	US enters WW II following the bombing of Pearl Harbor military bases. Japanese Hospital occupied by US Army, renamed 147th General Hospital O'ahu.
1942	With anti-Japanese sentiment growing in Hawai'i and the continent, Japanese Hospital changes name to Kuakini Hospital. Name reflects either Kuakini, governor of O'ahu in early 1800s and brother in law of Kamehameha I, or the street on which the Medical Center lies. Psychiatry residency established at Queen's.
1952	Kuakini nursing school closed, last class graduates 1955.
1963	End of rice growing on Kaua'i.
1965	State Hawaiian Medicine Board is terminated.

Year(s)	Historical Event(s)
1967	John A Burns School of Medicine is founded as a 2 year school, which teaches the basic sciences only at Le'ahi Hospital.
1971	Biomedical Sciences Building at UHM. Matsuo Takabuki, Democratic politician, attorney and developer appointed to Board of Trustees of Kamehameha Schools (then Kamehameha Schools/Bishop Estate). Maoli opposition is small at first, but culminates in a march in Waikiki of over 1,000. Some mark this as a major turning point in growing Maoli resistance to Democratic party oligarchy.
1973	JABSOM becomes a four year degree-granting school.
1974	Native Hawaiian Healthcare Improvement Act passed by US Congress, signed into law.
1976	First voyage of Hokule'a, voyaging canoe based on traditional design to Tahiti. The voyage disproved dominant anthropological theories which held that Maoli ancestors had "drifted" to Ka Pae 'Aina.
1980	US Congress establishes Native Hawaiian Study Commission.
1983	Native Hawaiian Study Commission issues its final report, including both a majority report written by the continental members of the Commission, and a minority report written by the Maoli members of the Commission. This minority report highlights the poor morbidity and mortality of the Maoli, in comparison to other groups in Ka Pae 'Aina. First reported case of HIV in Ka Pae 'Aina.
1984	Na Pu'uwai, Native Hawaiian Health System for Moloka'i founded.
1986	Maoli health professionals establish E Ola Mau, to reverse worsening Maoli morbidity and mortality. One of the products of this association was the Native Hawaiian Health Care Act.
1987	State Water Code enacted, with priorities on preservation of native streams and traditional and customary usages. First Punana Leo, immersion schools on a preschool level.
1988	Native Hawaiian Health Care Act, and Papa Ola Lokahi, coordinating and research agency for the five Native Hawaiian health systems, founded.
1991	Native Hawaiian Health Scholarship and Native Hawaiian Center for Excellence established.
1992	Native Hawaiian Health Care Improvement Act.
1992	Hoola Lahui Hawai'i, Native Hawaiian Healthcare system for Kaua'i founded.
1993	Twenty thousand Maoli commemorate overthrow of the Kingdom in 1893. US issues Apology Resolution, apologising for US role in overthrow of the Kingdom. Ho'okolokolo Nui Kanaka Maoli tries US and its allies for events of the revolution and its aftermath.
1994	Waiahole Ditch contested case hearing, where communities from the Windward side of O'ahu successfully argued that continued diversion of water from the Windward side was detrimental to the maintenance of the streams on that side of the island, as well as Maoli traditional and customary rights which depended on those streams as well as the system they are a part of.
1995	First irradiation station for papayas for quarantine treatment.
1996	Final year of sugar growing on O'ahu and Kaua'i.
1998	First Native Hawaiian Health and Wellness Conference held on O'ahu; in the prior year, separate 'Aha held on each of the eight major islands.
2002	Native Hawaiian Health Care Improvement Act.
2005	UH John A Burns School of Medicine moves to Kaka'ako.

Appendix B

Glossary

Hawaiian Term	Definition
ae'o	stilt
Ahupua'a	division of land and unit of production traditionally running from mountains to ocean
'aina	land, but literally that which feeds, reflecting the genealogical relationship between the land as kua'ana, or elder sibling and the kanaka as kaikaina, or younger sibling
alae ke'oke'o	Hawaiian coot
Ali'i	chief
'auku'u	heron
Ka Pae 'Aina O Hawa'i	the Hawaiian archipelago
ka wa hope	the time in back, the future
ka wa mua	the time in front, the past
kaikaina	younger sibling
Kalo	taro
Kaukau	a chant of lamentation, as addressing the dead directly; to advise, weigh in the mind, deliberate, reason with or appeal to
koloa	Hawaiian duck
Konohiki	steward of ahupua'a
kua'ana	older sibling
Loko i'a	fish pond
Lo'i	kalo paddy
Mai'a	Banana
Maka'ainana	commoner
ma'i oku'u	first epidemic during post-invasion era, likely cholera or dysentery
maoli	native, indigenous, true or real
Mo'i	ruling chief
na mea Hawai'i	Maoli culture
'ohana	family
ola	life, health
'ulu	breadfruit